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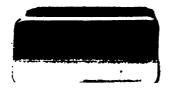
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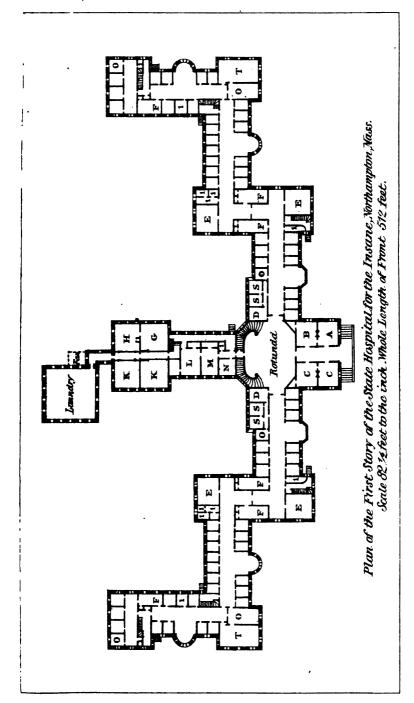
By Dr: Oliny Carle June, 1886



616.8% AL4 N87



HOBPUTAL FOR INBANE.



INDEX TO THE PLAN.

A. Office. B. Dispensary. C. Parlors. D. Rooms where patients see their friends. E. Sitting rooms. F. Dining rooms. G. Drying room. H. Ironing room. K.... Folding and distributing room. L. Farmers' dining room. M.... Farmers' sitting room. N. Private office. O. Attendants' rooms. S. For patients very ill. T. For suicidal patients. 1. Water-closets, sink-rooms, and bath-rooms.

No. 21.

TWENTY-SECOND ANNUAL REPORT

01

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT

NORTHAMPTON.

FOR THE YEAR ENDING

SEPTEMBER 30, 1877.

BOSTON:

RAND, AVERY, & CO., PRINTERS TO THE COMMONWEALTH, 117 Franklin Street. 1878.

OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL

TRUSTEES:

EDWARD HITCHCOCK, M.D. . . . Amherst.

SILAS M. SMITH, Esq. Northampton.

ADAMS C. DEANE, M.D. Greenfield.

HENRY W. TAFT, Esq. . . . Pittsfield.

HON. EDMUND H. SAWYER . . . Easthampton.

RESIDENT OFFICERS:

TREASURER:

PLINY EARLE Northampton.

Office at the Hospital.

SUBORDINATE OFFICERS:

JEREMIAH E. SHUFELT Male Supervisor.

LUCY A. GILBERT Female Supervisor.

F. JOSEPHUS RICE Steward.

MARY E. WARD Seamstress.

NELL RUSSELL Laundress.

CHARLES ZIEHLKÉ Baker.

Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor of the Commonwealth and the Honorable Council.

WE hereby present to you the Twenty-Second Annual Report of the Northampton Lunatic Hospital.

The number of patients in the hospital on the 30th of September, 1876, was: of men, two hundred and twenty; women, two hundred and forty-four; total, four hundred and sixty-four; and the number received in the course of the official year was: of men, sixty-eight; of women, seventy-one; total, one hundred and thirty-nine. The whole number under treatment within the year was, consequently: of men, two hundred and eighty-eight; of women, three hundred and fifteen; total, six hundred and three.

Thirty-eight men and forty-eight women, a total of eighty-six, were discharged; and twenty-one men and twenty-one women, a total of forty-two, died.

The number remaining in the hospital, September 30, 1877, was four hundred and seventy-five; of whom two hundred and twenty-nine were men, and two hundred and forty-six women.

The smallest number of patients on any day was four hundred and sixty-two, on the 9th of October; and the largest number, four hundred and ninety, on the 21st of June. The mean, or average daily number for the year, was a fraction over four hundred and seventy-six.

The recorded condition at the time of departure of the

eighty-six patients who left the hospital, was: recovered, thirty-three; improved, twenty; unimproved, thirty-two.

Our reports of the condition and progress of the hospital have, from year to year, heretofore been so full, that it seems unnecessary, at the present time, to enter largely into detail. Our Board have, as usual, held their regular monthly meetings at the hospital, as well as an adjourned meeting for the settlement of the business of the preceding year, and the completion of the reports to the State government.

The favorable state of the finances of the institution, which, for the past ten years, has enabled us not only to meet all current expenses, but to make extensive improvements, and to add, by purchase, about one hundred and twenty acres of land to the farm, without asking assistance from the State, still continues; and the whole establishment was never in better working condition than at the present time.

We would respectfully invite your attention to the chapter of the appended Superintendent's report, entitled, "How the Hospital is Supported;" and the succeeding one, in which he gives the financial results of the operations of the institution during the last twelve years.

As the new establishment at Worcester is to be opened at an early day, and that at Danvers at a period not far remote, it is probable that this hospital will soon become less uncomfortably crowded. The comfort of all concerned — patients, employés, and officers — will thereby be promoted. It is to be desired that the number of patients should be reduced to four hundred. That number can be comfortably accommodated; and with that number it is believed, that, at the present prices, the institution would still pay its current expenses and the necessary ordinary repairs. It probably could not, however, continue the course of improvements which it has pursued for many years.

In the early part of the official year, a wrought-iron fence, five feet in height and supported upon stone posts, was constructed along the boundary between the farm and the county road, a distance of more than sixteen hundred feet, from the entrance-gate to the land of Hiram Day, near the bridge across Mill River. It was built by the Healy Iron Works Company, of Brooklyn, N. Y., at a cost somewhat

exceeding six thousand dollars; and is a structure both substantial and ornamental. A contract has been made with the same company to continue the fence westerly from the entrance-gate, along the boundary of the road, a distance of over twenty-two hundred feet, to the corner of the land of Mr. Fowle. This section is to be finished within the current calendar year. The whole length of the fence will then be very nearly three-quarters of a mile.

In the course of the summer, the front portico of the central building—a brick structure so imperfect in its design and construction, that it became necessary, last year, to strengthen it with iron rods to prevent it from falling—was taken down, and another erected in its place. The new one is made of the Longmeadow brownstone. In beauty of design, solidity, and excellence of workmanship, it fully meets our expectations. It was erected by Dwelly, Stone, & Co., of Springfield; and its whole cost was about twenty-five hundred dollars.

The original flat, tinned roof of the boiler and engine house was taken off about two months ago, the walls of the building raised, and the whole covered by a new roof, sloped, slated, and furnished with dormer windows. This change cost abour six hundred and fifty dollars.

The fountain in front of the hospital, mentioned in our report for last year, was put in operation in June, and has proved an object of much attraction. The diversity of forms in which the water may be thrown from it is probably greater than that of any other in the State. The remodelling of the grounds around the fountain required the addition of about twelve hundred cart-loads of earth. More than half of this work has been done this year.

The hospital has always needed more pasturage. In the early part of the current calendar year, a tract of land, suitable for that purpose, and adjoining the premises upon the west, came into the market, and the opportunity was seized to supply that defect. It was bought at a cost of \$3,915. It contains, according to old surveys, about eighty-seven acres, but, by a new survey, made since it was purchased, ninety acres and forty-five rods.

Nearly a mile of new, open, board fence, of four horizontal rails, has been built upon the farm in the course of the sum-

mer. It was mostly made necessary by the acquisition of the aforesaid pasture.

The ox-shed has been newly shingled, and seventeen rooms in the hospital have been re-floored.

The farm has yielded largely of the necessary supplies for the table, the barn, and the stable. It continues, from year to year, to become more and more valuable as a means of support to the institution. A list of its products is placed in the report of the Superintendent.

The history of the year was marred by a very afflictive event in the death, by violence, of Mr. D. Erskine Barrett, while engaged, among his patients, in the performance of his duties as attendant. The accounts of it, published in the newspapers, were so full as to preclude the necessity of a similar narrative in this place.

The amount charged for the board of the patients in the course of the year, is,—

For state patients.				•	\$46,505 50
town patients		•			29,482 50
private patients	•		•	•	16,069 71
Total					8 92.057 71

An account of the receipts and the expenditures of money, with the sources of the former and the objects of the latter, is given in the appended report of the Treasurer.

The Auditors report that they have performed their duty, and found proper vouchers for all the entries upon the accounts.

The balances show that, at the close of the official year, Sept. 30, 1877, there were,—

Cash assets available for future u	se			\$ 28,508 66
And liabilities (bills payable)	•	•	•	7,029 60

Balance in favor of the hospital . . \$21,479 06
Besides this sum, which is a convenient and profitable working fund, the hospital has on hand purchased provisions

and supplies which have been paid for, to the value of \$13,332.17; as well as all the remaining products of the farm and garden, for the current calendar year.

Dr. Garlick, after successful and satisfactory service as Second Assistant Physician, resigned his office and left the hospital in November last. He was succeeded by Dr. William G. Kimball, who remained in the office less than five months, and then left to accept the position of Assistant Port Physician in Boston. The present incumbent, Dr. Daniel Pickard, began his duties in April, and has performed them hitherto to our satisfaction.

The year just closed has contributed its part to the improvement of the institution, and furnished additional evidence of the watchful, careful, economical, and humane management of its resident officers.

EDWARD HITCHCOCK. S. M. SMITH. A. C. DEANE. HENRY W. TAFT. EDMUND H. SAWYER.

NORTHAMPTON, Oct. 3, 1877.

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TREASURER'S REPORT.

The receipts for the hospital, in the course of the official year 1876-77, together with the sources whence they came, and the disbursements for the same period, with the objects of expenditure, are as follows:—

RECEIPTS.

Balance in hands of Tre						\$ 5,162	37
Received for board and patients	•	•		•		17,010	89
patients		_	•			31,098	66
Received for board and	conti	ngen	cies c	f st	ate		
patients		•	•	•		47,583	36
Received for animals, pr	oduce.	, &c.	, sold	•	•	461	00
for sundry acc	ounts	•	•	•	•	1,209	10
Total		•	•		•	\$ 102,525	38
D	ISBURS	ЕМ Е	NTS.				
For provisions and supp	lies					\$ 28,262	80
fuel		•	•			7,936	34
gas and oil .	•		•			1,112	61
water	•		•			802	00
salaries and wages	•	•				22,295	63
medical supplies						1,858	42
furniture, beds, and	l beddi	ing	•			2,414	33
clothing and dry go	ods					3,564	52
contingencies .	•	•				1,529	08
farm	•	•	•	•	•	4,054	36
Amount carried j	fo rwar (<i>d</i> .	•	•		\$ 73,830	09

Amount brought for	o rw ar	d			. :	\$ 73,830	09
For farm stock .	•					532	50
farm wages .			•			3,585	14
1,653 feet of iron fer	nce					6,203	62
other improvements	and:	repair	3			8,277	33
Enos Clark pasture,		-				3,915	00
miscellaneous expen	ses	•	•			1,229	77
Balance in hands of	Trea	surer,	Sept.	30,	1877	4,951	93
					-		
Total					. \$	102,525	38

PLINY EARLE,

Treasurer.

Northampton, Oct. 8, 1877.

We have performed our duty as Auditors, and report that we have found proper vouchers for all the entries in the accounts of the Treasurer.

EDMUND H. SAWYER. A. C. DEANE.

NORTHAMPTON, Oct. 3, 1877.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

The movement of the population of the hospital, and the general results of its medical history during the official year just expired, are shown in the following table.

GENERAL STATISTICS, 1876-77.

Based upon the Number of Admissions and not of Persons.

	Mules.	Females.	Total.
Patients in hospital, Sept. 30, 1876	220	244	464
Admitted from the general population .	42	38	80
Transferred from the Worcester Hospital .	6	17	23
Transferred from the Taunton Hospital .	16	6	22
Transferred from State Almshouse, Tewks-		1	
bury	4	6	10
Transferred from State Workhouse, Bridge-			
water	_	4	4
Total admissions within the year .	68	71	139
Total number of patients within the year . Discharged, including deaths	288 59	315 69	603 128
Remaining Sept. 30, 1877	229	246	475
Condition of Patients Discharged.	:		
Recovered	15	18	33
Improved	8	123	20-/
Unimproved	15	17	32
Died	21	21	42
Total	59	69	128
Daily average number of patients	227.21	248.95	476.16
	218	244	462
Smallest number on any day (Oct. 9).	233	257	490
Largest number on any day (June 21) .	200	201	T 00

The whole number of patients (603) in the house in the course of the year is less by twenty-six than in either of the next two preceding years, and smaller than in any foregoing year since 1868-69, when it was but 590. Notwithstanding this, the daily average number in the house (476.16) is larger by nearly two (1.95) than in 1875-76, and exceeds by a fraction that of any other year since the opening of the hospital. From these two facts it follows that the patients, on the average, remain longer in the hospital than heretofore; and this is a natural consequence of the constant increase of the number of those whose disease is chronic and incurable.

The number of patients (80) committed directly from the general population, is less than in any foregoing year during my connection with the hospital. Anteriorly to 1871, however, patients were received from any State; whereas, since that year, admissions have been restricted to residents of Massachusetts. The direct commitments of residents of this State were of smaller number during the last year than in any antecedent year since 1866. This diminution of admissions is doubtless mainly due to the depression in business, and the consequent difficulty in earning or raising money.

It will be perceived that fifty-nine of the patients were transferred from the other State institutions. This source of supply to the wards of the hospital will probably soon fail, in consequence of the opening of the new hospital at Worcester. Hence it may confidently be expected that the number of inmates here will be materially reduced in the course of the coming official year.

The foregoing table shows the number of admissions, or of patients admitted. Inasmuch as five persons—one man and four women—were admitted twice each, it follows that the number of persons was only 134, of whom 67 were men and 67 women. Most of the statistical tables in the appendix are made upon the basis of persons, and not of patients, or admissions.

Twenty-four of the persons admitted, or more than onesixth of the whole, had been treated at this hospital in preceding years. Twelve of them were men, and twelve women. This was the second admission of seventeen of

them, the third admission of three, the fourth admission of one, the sixth of one, the seventh and the eighth of one, and the ninth and the tenth of one. The two last mentioned were admitted twice each in the course of the year. Upon the next preceding discharge from the hospital of these 24 persons, their condition was recorded as recovered in thirteen of them, improved in six, and unimproved in five.

STATUS OF PATIENTS.

Of the 134 persons admitted, 54 were supported by the State, 63 by towns and cities, and 17 by individuals.

Since their admission, the support of three of them has been transferred from the State to towns, and that of one from an individual to a town.

Of the 128 patients discharged, including the 42 removed by death, the support of 63 was charged to the State, of 48 to cities and towns, and 17 to individuals.

Of the 475 patients remaining in the hospital at the close of the year, 241 are supported by the State, 173 by cities and towns, and 61 by individuals or private parties.

The average number for the year of each of the three classes, as derived from the numbers present at the end of every week in the year, is, for State patients, 254.84; town patients, 161.58; and private patients, 60.02.

RECOVERIES.

Of the patients directly received, within the year, from the general population, not more than one in five was apparently curable; and at least one-third of these were cases of periodical or recurrent mania.

Of the patients discharged in the course of the year, the mental condition of thirty-three appeared to warrant a record of recovery. Two of the patients were but one person,—a woman who was discharged twice within the year. Eleven of the thirty-two persons were beneficiaries of the State, sixteen were chargeable to cities and towns, and five to individuals. Of twenty-four of them this was the first admission. Three were here for the second time; three for the third time; one, the woman who was discharged twice, for the sixth and the seventh times; and one for the ninth time.

The woman who was discharged "recovered" twice, has already been received again, on her eighth admission. Her disorder is always mania, with high excitement; and the recovery from it appears, at each discharge, to be entire. can hardly be classed as a case of periodical mania, only so far as the woman's ability to procure enough whiskey to bring it on is a matter of periodicity. On the score of recoveries she is, as will readily be apparent, a valuable patient to the hospital. She recovered twice, or, in other words, two hundred per cent of her recovered in the course of the year; and it is quite within the bounds of possibility that three hundred per cent more of her may recover in the year next ensuing. She is pretty rapidly piling up that kind of recoveries of recent cases which enter largely into the basis upon which, - and by assuming that each recovery is the permanent restoration of an individual to the class of producers, - quite a number of statisticians have shown us one method of increasing the wealth of the States, and consequently of the nation. Hence it would, in one respect, be a pity to lose her; but the simple truth is, that she would probably recover as well, and as rapidly, at any other place where the rum fiend could be kept away from her, as she does here.

In three of the cases discharged recovered, the disorder was periodical mania. Two of them were here each on her third admission, and the third on her ninth admission. The first two have now been discharged as recovered three times each; and the last one, six times as recovered and three times as improved.

DEATHS.

The number of deaths was 42. This is one more than in the next preceding year, and is in excess of any other year since 1868. Of the persons who died, 24 were supported by the State, 12 by cities or towns, and six by individuals.

As usual, nearly all of the deaths were the results of chronic disease; and in no less than 18 (or about 43 per cent of the whole) that disease was pulmonary consumption. Next after this in numbers, stand epilepsy and paralysis, each of which proved fatal in five cases.

The hospital was visited by no severe epidemic or endemic disease; and the usual disorders of the warm season prevailed only to a medium extent.

There was no suicide. We have been favored with an unusually long period of exemption from that form of death. No patient has committed self-destruction since January, 1872,—a period of five years and eight months. The hospital has been in operation 19 years; and the total number of suicides is 12. In the first nine years there were nine; and in the last nine years, only two. The remaining one occurred in the tenth, or middle year.

The daily average number of patients during the first period of nine years was 327; and during the last period of nine years, 444. The *proportion* of suicides to the average of patients in the house, was six times as great in the first period as it was in the last.

One patient came to an untimely end by accidental drowning. He was an epileptic, who for several years, and with the approbation of his friends, had the freedom of the premises. Exceedingly fond of angling, he spent much of his time in that sport along the banks of Mill River. While engaged in it, on the thirtieth day of August last, he was seized with an epileptic paroxysm, or "fit," and fell into the river.

It also becomes my melancholy duty to record the death, by violence, in February last, of a faithful and trustworthy young man, who, for several years, had been employed as an attendant in the men's department. He came to his end, while in the performance of his duty, in the hall of which he had the charge. Circumstances point strongly to two of the patients; but it is not positively known whether both, or only one of them, committed the deed.

The mortuary history of the hospital from the time it went into operation is given, in a condensed form, in the following table:—

Deaths and their Ratios, from Sept. 30, 1858, to Oct. 1, 1877.

OFFICIAL	Whole No.	Daily average No. of		DEATHS. Per cent on Whole No.		1	
YEAR.	Patients.	Patients.	Men.	Women.	Total.	of Patients,	No. of Patients
1858–59,	313	229.55	7	12	19	6.07	8.27
1859–60,	398	255.96	9	18	27	6.78	10.54
1860–61,	434	314.26	15	15	30	6.91	9.54
1861–62,	442	313.80	9	10	19	4.29	6.05
1862–63,	470	355.28	19	7	26	5.53	7.31
1863–64,	475	357.63	17	30	47	9.89	13.14
1864-65,	469	312.40	17	24	41	8.76	11.97
1865–66,	488	376.35	18	13	31	6.35	8.23
1866–67,	543	401.03	23	24	47	8.65	11.71
1867–68,	565	413.41	25	18	43	7.61	10.40
1868–69,	590	405.10	13	12	25	4.23	6.17
1869–70,	604	408.83	22	11	33	5.46	8.07
1870-71,	616	421.90	16	12	28	4.54	6.64
1871–72,	619	428.72	19	18	37	5.97	8.63
1872–73,	614	437.23	13	8	21	3.42	4.80
1873–74,	626	469.54	14	11	25	3.99	5.32
1874-75,	629	475.35	23	18	41	6.52	8.62
1875–76,	629	474.21	18	19	37	5.88	7.80
1876–77,	603	476.16	21	21	42	6.96	8.82

The average proportion of deaths for the whole period is, on the whole number of patients admitted, 6.20 per cent; and on the daily average number in the house, 8.52 per cent. For the past year, the two numbers are 6.96 and 8.82 respectively; and consequently the mortality was somewhat in excess of the average. It was, however, materially below the average of the first ten years of the operations of the hospital.

It will be perceived that the number of deaths of men was the same as that of women. But the number of women-patients was considerably larger than that of men; and it necessarily follows that their proportion of death; was smaller. Of the two sexes the ratio of mortality here of men has always exceeded that of women.

WORSHIP AND ENTERTAINMENT.

That part of the so-called "moral treatment" which is comprehended under this caption, is exhibited in the subjoined schedule:—

1.	Exercises on the Sabbath,—		
	Divine worship in the afternoon	53	days.
2.	Exercises on Secular Evenings,—		
	a. Readings; opening and closing with sacred music:—		
	*********	90	3
	The Bible		days.
	The Bible, and selections of prose	5	"
	The Bible, and selections of poetry .	25	"
	Miscellaneous selections of prose	50	"
	Miscellaneous selections of poetry	67	66
	Miscellaneous selections of prose and		
	poetry	68	"
	b. Lectures; opening and closing with sacred music:—		
	The man of integrity	1	"
	The rules and regulations of the hospital	1	"
	Stoke Pogis, and the grave of the poet		
	Gray	1	66
	c. Other entertainments:—		
	Pictures shown by oxyhydrogen lantern.	7	66
	Concert of instrumental music	1	44
	Concerts of vocal and instrumental music	4	"
	Recitations	4	"
		4	••
	d. Social gatherings:—	4.0	
	Quadrille parties	18	"
	No assembly	21	66
	m		,

Upon only twenty-one days in the official year was there no assemblage of the patients for some one of the purposes mentioned. Thirteen of those days were sufficiently occupied by the visits of the Board of Trustees, one by that of the Governor and Council, and one by that of the Legislative Committee on Public Charitable Institutions.

Total

. 365 days.

The religious exercises of the Sabbath were conducted in rotation by the pastors of several of the denominational churches in Northampton, and, in a few instances, by other clergymen.

For the exhibition of pictures, we are indebted to Dr. T. W. Meekins.

FARM.

The season, as a whole, has been very favorable for the products of the farm and the garden. The following account of them, mostly derived from actual weighing or measurement, was furnished by Mr. Wright:—

Hay (first growth, ho	me f	arm)	, 751	tons.	. 8	\$1,363	50		
" (second and third growths, home farm), 38‡									
tons .	•				•	697	50		
" (first growth, P	arson	s' lo	t), 9‡	tons.	•	175	50		
" (second growth	, Par	sons'	lot),	31 tons	•	58	50		
" (first growth, C	larke	ore	hard).	19‡ to:	ıs .	346	50		
" (second growth						130	50		
Corn fodder (green)	•					90	00		
" " (dry)				20		100	00		
Oat straw				5	"	50	00		
Corn				400 l	oushels	240	00		
Oats				300		132	00		
Broom-seed .				75	"	18	75		
Potatoes				3,156	44	1,578	00		
Carrots		•		510	66	255	00		
Beets				538	"	215	20		
Onions			•	313	66	156	50		
Turnips				615	66	184	50		
Parsnips				30	66	15	00		
Beans, Lima, in shell				105	66	191	50		
" common, in sh				24	46	45	60		
" string .				27	66	37	50		
" Lima, dry		•		5	"	15	00		
Pease, green, in shell		•		1181	"	147	62		
Sweet corn, green, in		_		182	66	182			
Cucumbers		•	•	112	66	112			
Tomatoes		•		153½	"	153			
_ · ·	•	•	•	1002	•	100	.,,		

Amount carried forward

\$6,691 67.

Amount	broug	ht for	rward	l.			8 6,691	67
Squashes,	sumn	ner		•		58 bushels,	· 5 8	00
٠.	winte	r	•		•	$6\frac{1}{2}$ tons	125	00
Melons	•	•	•			6,195 lbs.	68	4 0
Lettuce						.71 bushels	71	00
Asparagus						. 21½ "	86	00
Pie-plant	•		•	•		. 17½ "	17	50
Beet-green	8		•			56 "	45	25
Cabbages				•		6,000 heads,	240	00
Currants, 1	ed	•	•	•		24 bushels,	96	00
Apples		•				110 barrels,	275	00
Pears						. 11½ bushels,	28	25
Beef, raised	l her	е	•			4,902 lbs.,	415	96
Veal .	•	•	•			405 "	51	06
Pork .	•	•	•			13,605 "	1,125	80
Pigs, sold	•					74 .	235	00
Turkeys	•					241 .	58	12
Chickens		•				81 lbs.,	16	20
Heads and	pluc	ks		•			25	00
Tallow	•					334 lbs.,	17	50
Eggs						. 77 doz.,	16	53
Milk, grass	\mathbf{fed}					18,902 quarts,	1,134	12
Cider .						6 barrels,	30	00
Broom-brus	sh				•	600 lbs.,	48	00
Hides, raise	ed he	re		•		460 "	27	60
Calf-skins						6.	9	00
Roasting-pi	igs,					5 .	14	50
Wood	•			•		25 cords,	7 5	00
\mathbf{Lumber}			•	•		8,000 feet,	96	00
Posts						100	20	00

\$11,217 46

The total value, as estimated in dollars and cents, has been equalled in but one foregoing year; and that was at a time in which the prices of agricultural products were higher than they are now.

Of hay there was a large crop. The first growth was harvested early, and time was thus given for an unusually large growth of rowen. Upon the original home farm, 4½ tons of third growth was secured. The whole product of the home

farm was 114½ tons, against 42 tons in 1866, and an average of from 50 to 60 tons during the ten years next preceding 1868. The total product of all the land now belonging to the hospital was 154 tons. In addition to this, standing grass was purchased, which yielded 108 tons; making the whole quantity laid in, 262 tons.

Lest the foregoing schedule might in some points be misunderstood, it appears necessary to explain the items of milk and meats. The actual quantity of milk was 18,902 gallons, or four times as much as is stated in the list. The threefourths which is omitted, is that which is estimated to have been produced from purchased feed, and from the hay and other vegetable products of the farm, which are inserted under their proper heads, and their value already credited. All the meats in the list are those of animals raised upon the farm.

In the late autumnal months 100 sheep and 18 cattle, three years old, were purchased, stabled, and fed on the premises, and slaughtered as needed. They furnished most of the fresh beef and mutton until the first of April.

The number of hogs raised and fattened upon the premises, and slaughtered within the official year, is 35. Their dressed weight, individually, was 332, 309, 361, 355, 376, 366, 301, 392, 400, 359, 400, 318, 420, 353, 400, 342, 400, 293, 427, 400, 629, 514, 325, 440, 300, 400, 300, 671, 518, 401, 324, 127, 313, 334, 705. Aggregate weight, 13,605 pounds. The average weight of the heaviest ten was 512 pounds; that of the heaviest five, 607 pounds. We purchase no salt pork, no lard, and but a very small quantity of fresh pork, ham, or sausages. The sausage meat, of which a liberal quantity is made, is eaten in fried rolls, when new. The hams and shoulders are cured here, and smoked off the premises.

The farm is now stocked with 8 horses, 8 oxen, 1 bull, 2 two-years steers, 32 cows, 6 calves, 33 fat hogs, 3 boars, 16 breeding sows, 19 shotes, 56 small pigs, and poultry somewhat in excess of ordinary years.

DIETARY.

The report rendered one year ago contained the dietary of the hospital, in detail. Within the intervening year the question has several times been asked, by persons not con-

nected with the institution, how nearly that dietary is followed. For the satisfaction of others who may be interested in the subject, it may here be stated that the intention is to follow it exactly, and in full. This is generally done; and if, from inability to procure any article mentioned therein, a deviation becomes necessary, the article is substituted by some other, of equivalent quality and quantity.

HOW THE HOSPITAL IS SUPPORTED.

It is now more than ten years since the hospital received any direct assistance from the State. During that period it has relied, as it still relies, not only for its current support, but for the means of paying for all its repairs, improvements, and purchases of real estate, solely upon its income from the board of its inmates, the products of the farm, and the allowance of the sum of ten dollars each, for burial expenses of such of the State patients as die while under treatment here. The amount received, during the year just expired, from the source last mentioned, is two hundred and fifty dollars.

For the support of the State patients, it receives three dollars and fifty cents (\$3.50) each, per week, from the public treasury. This sum covers, not board alone, but clothing and all breakage, and other damage which is suffered from them. The State patients are a majority of the inmates. The weekly average of them, for the past year, was 53.49 per cent, or a little more than one half of the whole.

For town patients, the hospital is paid three dollars and fifty cents each, per week. This does not include the cost of clothing, or damages for destruction extra charges being made for those. The weekly average of these patients, during the year, was 33.91 per cent, or a fraction more than one-third of the whole.

For private patients the income varies. No one pays over ten dollars per week; and the average of all who were in the house at the close of the year (September 30) was five dollars and thirteen cents (\$5.13). This covers all necessary expenses, except clothing and damages.

The weekly average of private patients the past year, was 12.6 per cent, or about one-eighth of the whole.

The average weekly pay, per capita, which the hospital received for ALL its patients, — State, town, and private, — in

the course of the year, is three dollars and seventy cents and seven mills (\$3.707).

Such being the resources of the institution, it may not be uninteresting to learn the results of

THE FINANCE OF THE LAST TWELVE YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of three hundred and two dollars and four cents (\$302.04) in its favor. Between that time and the first of June, 1867, it received a direct bonus from the State of five thousand dollars, in two appropriations, for specific purposes—one of two thousand and the other of three thousand dollars.

As an offset to the five thousand dollars bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and twenty-nine acres, the total cost of which was twenty-one thousand one hundred and sixty-five dollars (\$21,165). The State, then, has been overpaid for its bonus, in the sum of sixteen thousand one hundred and sixty-five dollars (\$16,165).

The amount paid by the hospital for repairs and improvements, in the course of the twelve years, from Sept. 30, 1865, to Sept. 30, 1877, is one hundred and forty-three thousand eight hundred and forty-four dollars and twelve cents (\$143,-814.12).

The surplus of cash assets now on hand is twenty-one thousand four hundred and seventy-nine dollars and six cents (\$21,479.06), or twenty-one thousand one hundred and seventy-seven dollars and two cents (\$21,177.02) larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing now on hand, are estimated to have cost thirteen thousand three hundred and thirty-two dollars and seventeen cents (\$13,332.17). The amount of similar supplies on the 30th of April, 1865, was two thousand and five hundred dollars (\$2,500). The increase of assets under this head is, therefore, ten thousand eight hundred and thirty-two dollars and seventeen cents (\$10,832.17).

The value of household furniture in the hospital is, at a low estimate, at least ten thousand dollars greater than it

was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called eight thousand dollars.

Collecting these several sums, the account of debit of the Commonwealth to the hospital appears to be as follows:—

Excess of cost of land over	r di	rect	bont	ıs		\$ 16,165	00
Repairs and improvements						143,844	12
Excess of present cash asse	ets					21,177	02
Increase of provisions and	supp	olies	•			10,832	17
Increase of furniture .		•	•	•	•	8,000	00
Total,						\$ 200,018	31

The necessary current repairs of the buildings may be estimated at three thousand dollars annually. Deducting this sum for each of the twelve years since Sept. 30, 1865, a total of thirty-six thousand dollars (\$26,000), there is a remainder of one hundred and sixty-four thousand and eighteen dollars and twenty-one cents (\$164,018.21). To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

THE CURABILITY OF INSANITY.

Introductory. — The report which I had the honor of presenting to you at the close of the official year 1875-76, contained a chapter upon the curability of insanity, including a historical sketch, illustrative of the means by which it had become a commonly received opinion, among nonprofessional persons interested in the subject, in this country, that insanity is an eminently curable disease. It was there shown that, by mistaking cases for persons, and percentage of recoveries of patients discharged for percentage of recoveries upon patients received at the hospitals, it had come to be generally believed, that, if sufficiently early subjected to treatment, from 75 to 90 per cent of all persons becoming insane can be cured, and restored from the class of mere consumers to the class of producers of the necessities for human sustenance.

"A wise man," says Pinel, "is cautious how he becomes the echo of a commonly received opinion;" and the necessity and prudence of such caution were strikingly exhibited in the results of our exposition of methods of reporting, and in our analysis of some of the most trustworthy statistics upon which the aforesaid opinion must rely for its support. That opinion had been not only echoed, but re-echoed, throughout the land. A comparatively brief discussion of its merits showed it to be one of the greatest of fallacies.

It was shown that a very important proportion of the recoveries of recent cases are merely the temporary and repeated restorations of a comparatively small number of persons from paroxysms, more or less transient, of periodical or recurrent insanity. As, in a theatre, a score of supernumeraries marching in regimentals across the stage, and disappearing only to re-appear again, may impress the uninitiated with an ideal army of no insignificant numbers; so, in the drama of life, a few men and women, by entering and leaving the hospitals, as they sometimes do, with an industry of change quite remarkable, may send forth to an admiring world a host of statistical recoveries. And as, upon the stage, the few men who appear as an army of soldiers are not soldiers; so the few persons who, at the hospitals, make a show of a multitude of recoveries, have not really recovered. In the former case there are no soldiers; in the latter, no permanent cures. The almanac, a very popular work on statistics, reports thirteen new moons every year; and yet all of these new moons are nothing more nor less than the old one. So Worcester hospital had a patient who recovered seven times, and hence was counted as seven patients recovered, in one year; and yet she was nothing more nor less than the old patient who had recovered five times in the next preceding year, and four times in the year one farther removed in the past.

"How many cows have you?" inquired a man of an amateur farmer. "My brother and I," was the reply, "have twenty." Now, although this statistician told the truth, and although "figures cannot lie," yet it so happened that the inquiring man was grossly deceived. The truth was, that the brother owned nineteen of the cows, and the man himself only one.

The superintendents may honestly claim, that they truthfully report their recoveries; but, nevertheless, they report them in such manner that they have been greatly misunderstood, and have consequently led to the most glaring errors. The courts of judicature require a pledge to tell not only the truth, but the whole truth.

New Hampshire Report. - It is very easy, in preparing their reports, for the superintendents of the hospitals so to explain their cases of recovery that the general misapprehension in regard to them may be corrected. Bancroft, of the State Asylum at Concord, N.H., in his last report, which was written since the publication of the report of this hospital for 1876, has introduced, for the first time, such an explanation. His recoveries, as reported in mass, were 36; but, in allusion to them, he says, "Fifty-eight per cent of the recoveries are of persons who have some time recovered from previous attacks." 1 Furthermore, he publishes a new table, in which he shows the number of attacks from which they had recovered. exposition is, in brief, as follows: Of the 36 persons who recovered, 21 (58 per cent) had previously been insane and Eight had previously recovered each from one attack; seven from two attacks; one from three attacks; two from four attacks; one from five attacks; and two from seven attacks each. In other words, those 21 persons had previously given fifty-two recoveries to the statistics of the hospital. They have now given twenty-one more. Their total of recoveries is, therefore, seventy-three, or nearly four to each person; and they have gone out of the institution, unquestionably not "permanently restored to the class of producers," but most, if not all of them, to return again, and some of them many times, each recording an additional recovery at every time, and thus swelling that crowd of. hypothetical or assumed persons recovered, upon which rest some of the calculations of deluded statisticians.

Most decidedly the doctor's explanation throws abundant light upon what otherwise, having the aspect of light, would really have been delusive darkness. In the interest of truth it is to be hoped that others will follow his example. And wherever it may be followed, similar results will most certainly be reached, — results alike in character, but differing

1 Not italicized in the original.

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in degree according to the age, and, to some extent, the situation of the hospital. As a rule, the older the hospital, and perhaps the nearer its situation to a large city, the greater will be the number of double, triple, and multiple recoveries of individuals.

Delirium Tremens in Insane Hospitals. - In the chapter on Curability, of last year, it was asserted that "at some of the institutions, a number not inconsiderable of recent cases are not cases of insanity proper, but of delirium tremens;" but no attempt was made to illustrate the proposition by any positive statistical information. The assertion might have had the still stronger extension that a number not inconsiderable of the recent cases which flourish as recoveries in American statistics were cases of sheer and simple drunkenness, without any delirium whatsoever. It is possible that these assertions are more emphatically applicable to the cases at the Bloomingdale Asylum, New York, than to those of any other hospital in the country. Yet there are good reasons for the belief that there are several other institutions the records of which contain large numbers of such cases; and that a liberal sprinkling of them may be found in nearly all.

Nearly thirty years ago I published an analysis of the cases treated at Bloomingdale, from the time of its opening to the close of 1844, a period of twenty-three and a half years. The number of admissions was 2,937. In the classication of these cases, no less than 594, or a trifle more than one-fifth of them, were placed under the head of delirium tremens, including the cases of mere habitual drunkenness. It is possible, also, that there were a few whose mental disorder was a little more prolonged than that of delirium tremens, and hence might have been more appropriately classed as the mania of alcoholism. But the number, if any, was very small.

These 594 cases were furnished by 322 persons, many of whom were admitted more than once. These 322 persons (making, by re-admissions, 594 cases) furnished 512 recoveries to the statistics of the institution.

Thus, in the medical records of the Bloomingdale Asylum, prior to the year 1845, there are 512 recoveries from delirium tremens and ordinary fits of drunkenness, which still stand in their tables of statistics, as published in their annual

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reports to the present time, as recoveries from insanity; and whosoever uses the statistics of that asylum, as they are published in those reports, to illustrate any question relating to insanity, uses those 512 recoveries from delirium tremens and ordinary inebriety.

Dr. Gray, of the State Asylum at Utica, has for some years reported such cases, not as recovered, but as "not insane."

Dr. A. E. Macdonald, of the New York City Asylum, Ward's Island, reports them in the same way. In his report for 1876, he alludes to those who left the asylum within the year, in the following language: "The 15 discharged as 'not insane,' would, in the reports of some asylums, be classified as cases of 'dipsomania,' or 'alcoholic mania,' and used to swell the total of recoveries. I do not so use them, because they were simply drunkards, suffering from the effects of a debauch; and I do not consider them entitled to have the mantle of insanity, and therefore of irresponsibility, thrown over their misdeeds."

Dr. Macdonald evidently believes that drunkenness is a vice, and not a disease.

Proportionate Decrease of Recent Cases. - Notwithstanding the fact that the advantages of early treatment have been constantly proclaimed in the annual reports of the hospitals, for nearly half a century, there is to-day no reason to believe that any larger proportion of the insane of Massachusetts are taken to the hospitals in the acute stages of the disorder than in the earliest years of the history of the hospital at Worcester. Of all the admissions to the public institutions, the proportion of recent cases appears indeed to be smaller now than it was at that remote period. This result, however, is apparently to be accounted for by the supposition, not that fewer recent cases, but that a larger number of old cases, are removed to those institutions. As hospital accommodations have increased, more and more of the large class of the chronic insane, who formerly remained among the people, are thus removed from their homes.

This non-increase of recent cases in the hospitals has in some places been attributed to an increase of prevailing prejudices against those institutions. I cannot regard this hypothesis otherwise than as erroneous. Those prejudices were, in my estimation, as general and as strong forty years

ago as now. No hospital in this State has been more subjected to unjust censure among the people than that at Worcester, when under the care of Dr. Woodward; and no superintendent has had harder stories, or, probably, more that were untrue, told of him, in what Dr. Bell, writing upon the subject, in reference to the McLean Asylum, called the "undertow of society."

If prejudices against the institutions have had so potent an effect, and if those prejudices have been increasing, how happens it that, here in Massachusetts, although hospital after hospital, in pretty rapid succession, has been erected, yet, as each one was opened, it was soon filled to overflowing, and a little later became crowded, almost packed, with inmates, as the three large state hospitals have been during the last two or three years?

English Asylums. — Dr. Bucknill would have us believe, and some of our American writers appear to believe, that those prejudices — prejudices suffered in common by all institutions for the insane, the world over — have mostly been overcome in England through the beneficent surveillance of the commissioners in lunacy. Be that true, or be it not true, there certainly has been no great rush of recent cases into the hospitals in that country, as a consequence of this asserted improvement in the public estimation of them. On the contrary, we find the same process of increase of chronic cases admitted, going on in the institutions of our fatherland as in our own.

In his report for 1876 of the Derbyshire Lunatic Asylum, Dr. J. Murray Lindsay uses the following language: "The admissions of the past year have been of a still more unfavorable class than usual, both as regards their physical condition, mental state, and duration of insanity. . . . Instead of the Asylum being looked upon as a hospital, to which patients laboring under mental aberration should be sent in the earliest stages of their malady, there appears to be an increasing tendency to detain them at home, and to delay sending them to the Asylum until every resource has failed, and then to the Asylum as the last refuge."

Dr. Samuel Mitchell, superintendent of the South Yorkshire Asylum, informs us, in his report for 1874, that of 363 patients admitted within the year, "only a small number were brought suffering from insanity in its earlier stages; on

the contrary, they arrived here showing all the symptoms of the disease in its most advanced and incurable forms."... "So earnest," says he, "in many cases, is the endeavor on the part of their friends to keep at their homes patients suffering from mental diseases, that it is quite the exception ever to receive into the asylum a patient in the early stages of general paralysis—a form of mental alienation in which the sufferer usually becomes so troublesome as to require constant supervision in its earlier manifestations."

The condition of things is much the same in Wiltshire. Dr. J. Wilkie Burman, in his report for 1873, says: "I regret to have to state that the admissions continue to be of a very unfavorable nature, as to prognosis and prospect of recovery, in a large proportion of the cases." And in his report for 1875 it is asserted that "in only 55 out of the 130 cases admitted during the year, was there the slightest reason to entertain hopes of recovery; and, of these, 23 have been discharged recovered, 4 have died, and the rest remain, in only a few of whose cases is any improvement expected."

Dr. James Sherlock, of the Worcester asylum, testifies strongly in the same direction, in his report for 1874. cases received," says he, "have for several years past been of an eminently unfavorable class. It is remarkable how few cases of recent acute mania and melancholia are passed to our care from year to year; but the number of those who gradually subside into an irresponsible, unmanageable, and insane state continues unabated." . . . "It is probable that now, at the end of the twenty-second year of the existence of your asylum, there are not received, from year to year, more recent acute cases than were consigned to it in the earlier years of its establishment; but the number of patients whose insanity has been gradually developed from defect of diagnosis, and by the lapse of proper preventive means, has largely increased. Many such of the latter class are now regularly sent here, but not at a date sufficiently early to insure recovery, or even improvement."

Dr. T. Algernon Chapman, of the Hereford Asylum, in an interesting article in "The Journal of Mental Science," for July, 1877, says, "It remains a great fact that a mass of incurable cases are being forced into our county asylums." He maintains, however, that a very large proportion of them

were never curable; that they are "cases of gradually progressive insanity," or of "incurable brain disease," or of senile insanity, idiocy, and epilepsy.

From Wales, which is within the jurisdiction of the English commission in lunacy, we have the testimony of Dr. G. J. Hearder, who, in the report for 1874, of the Carmarthen Asylum, wrote as follows:—

"It is a most lamentable fact, that for every case sent here for treatment, while treatment will avail, three cases are allowed to sink, by continued neglect, into a state of utter hopelessness."

If, then, in England, where so many institutions have existed for so long a time; where population is almost stationary as compared with the migratory people of this country; where all branches of the civil service of the national, the county, and the municipal governments are, and long have been, so perfectly organized and so efficient in administration, and where a commission in lunacy has exercised a watchful supervision during a period of more than thirty years, - if, under these circumstances, it has there been impossible to increase the proportion of curables received at the hospitals, to induce the relatives or guardians of those who become insane to take them in the early stages of the disease to the curative institutions, and to prevent, by curing these recent cases, the increase of the number of the insane, how can it be expected that those objects should have been accomplished in this country?

Supposed Causes of Delay.— It has long appeared to me that he who seeks the true causes of delay in the removal of the insane to the institutions provided for them, must look to social life, to the homes and the relatives of the persons who are proper subjects for the ministrations of those institutions: and I have recently met, in a foreign report, views so nearly coincident with my own, that I here reproduce them.

"The recourse to asylum treatment," says Dr. James C. Howden, in his report for 1875 of the Montrose Asylum, Scotland, "may be assumed in every case to be a matter of social convenience. In recent cases, of course, the probability of recovery to a certain extent influences relatives; but in far the greater number of instances, the exigencies of the

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situation settle the point, and the patient is sent to the asylum because he cannot be conveniently kept at home."

But what are the motives for such delay? They are various: motives of affection, motives of economy, and not infrequently motives of pride. Hence, how much soever institutions may be improved, or what extent soever prevailing prejudices in regard to them may be overcome,—and I have little faith that there will be much change in that respect—it is very doubtful that the insane, as a whole, will ever be placed under hospital treatment at a much earlier period of their disease than they are at the present time.

Dr. Mitchell's Essay. — "The (Lollon) Journal of Mental Science," in its issue for January, 1° contains an article by Dr. Arthur Mitchell, one of the Commissioners in Lunacy for Scotland, which is the most valuable original statistical contribution to our knowledge of the actual curability of insanity, as first recognized at public institutions, that has appeared in many years. As Commissioner in Lunacy, Dr. Mitchell has at hand all the statistics of all the hospitals (or asylums) for the insane in Scotland. Hence, if a patient is discharged from one asylum, and, either immediately or at some subsequent period, is received into another, he (the doctor) is informed of it. In this way every patient admitted to any asylum may be afterwards followed, so long as he remains in any public institution in the country, no matter how frequent the changes may be.

The object of Dr. Mitchell's article was this: to take all the persons admitted for the first time into all the Scottish asylums, in a given year, and, twelve years afterwards, to show what had become of them, and what was their mental condition, if living, or, if dead, at the time of death. The most important of the statistics of the article are as follows:—

The number of patients (in this instance, persons) admitted in the year 1858, was 1297. Twelve years afterward, in 1870, it was found that 412 of them had already died in the asylums, and 273 remained in them. Thus 685, insane at death, or still insane, are accounted for. The remaining 612 had disappeared; but the history of 411 of them was successfully traced.

42 of them had died insane. 94 were living, and insane.

Total, 136 insane.

ioniad died not insane.
197 were living, and not insane.

Total, 275 not insane.

Hence, of 1,096 persons whose history was traced, 454 had died insane, and 365 still lived, insane. Total, 821 insane. And 78 had died n. Sane, and 197 still lived, not insane. Total, 275, not insane. Percentage of insane, 74.91—; percentage not insane, 25.09+. In general terms, three-fourths were insane, and one-fourth not insane.

On the assumption that, of the 612 who had disappeared from the asylums, the results of the 411 whose history was traced were equally true of the 201 whose history had not been traced, Dr. Mitchell, in a foot-note, gives the general results in regard to the whole of the 1,297 persons. In proportions these results are as follows:—

Dead, insane at the time of death		36.6 per cent.
Alive and insane	•	31.7 " "
Alive and sane, or sane at death	•	31.7 ""

Good as is Dr. Mitchell's paper, let it not be forgotten that it does not give final results, except in the cases of the dead. Of the 197 persons known to be still living and not insane, and the 97 who, of the untraced 201, are assumed to be living and not insane, it is very likely that a no unimportant number will yet return to the asylums, and die there. Making due allowance for these, it is quite apparent that the final results, in regard to these 1,297 persons, will approximate closely to the final results in the cases of 244 persons, as shown in the best and most reliable of all essays upon the subject in the English language — best and most reliable simply and only because its results are final. The essay alluded to is that of which the general statistics are given below.

Dr. Thurnam's Investigation. — Dr. Thurnam traced the history, until death, of 244 persons treated at the Friends' Retreat, near York, England, and obtained these results:—

Died insane during first attac	e k		•	•		113	
Recovered from first attack	•	•	•	•		131	
					-		244
Recovery permanent (of the	131),	died	sane			45	
Had subsequent attack .	•			•		86	
							131
Died insane (of the 86).		•	•	•		66	
Recovered, and died sane	•	•		•	•	20	
						_	86

Hence he drew the following conclusions: -

"In round numbers, then, of ten persons attacked by insanity, five recover, and five die, sooner or later, during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die. But, although the picture is thus an unfavorable one, it is very far from justifying the popular prejudice, that insanity is virtually an incurable disease; and the view which it presents is much modified by the long intervals which often occur between the attacks, during which intervals of mental health (in many cases of from ten to twenty years' duration), the individual has lived in all the enjoyments of social life."

All of the original statistics of all the American institutions for the insane, wherever, whenever, and in what manner or form soever published, are of less value in determining the question of the curability of the insane, at the time when they first enter the hospital, than the two papers of Dr. Mitchell and Dr. Thurnam. The conclusions of the latter were published in the report of last year; but are here repeated, because, although before the profession for a generation, they have rarely been quoted; and in their stead the public have been almost constantly entertained by the now essentially traditional assertion, "from 80 to 90 per cent" (or something like it) "can be cured,"—assertions which, in the language of Dr. Bates, published almost thirty years

"ago, are received with wondrous admiration by that portion of the public who are better pleased with marvellous fiction than with homely truth."

"To this complexion have we come at last;" and neither physicians, nor humanitarians, nor political economists, nor other scientists, need longer lay the flattering unction to their souls, that even 40, and much less 50, 60, 70, or 75 per cent of insane persons, as they first appear at the hospitals, can be permanently cured, and restored to the class of producers. They will be obliged to look the problem of insanity and the insane fairly and squarely in the face, in the aspect under which it is here represented; for though they build, as a hospital for the insane, a temple costly as that of Solomon, or a tower like that of the plain of Shinar, upon the highest hilltop of every county in the land, they will not essentially alter it.

There is a time for every thing.— That the time had fully come in which a new review, in this country, of the subject of the curability of mental disorders was specially important, there are many evidences. Not the least of these was the situation of general statisticians, who, impressed with the belief that "from 75 to 90 per cent" of the insane are susceptible of cure, were floundering in the dark, and vainly endeavoring to explain the rapid increase of the number of those mental invalids among the people. In this, and other connate questions, a vast amount of time, labor, pens, ink, and paper have been wasted by authors and printers. Worse than wasted; because the deductions, conclusions, or supposed demonstrations, so far from being the essence of truth, were oftentimes among the most egregious of errors.

Among the many persons who have expressed their satisfaction with the article in question is Dr. Nathan Allen of Lowell, whose statistical and other works upon various important subjects, have deservedly given him a European as well as an American reputation.

"Please accept," he writes, "my thanks for your valuable paper upon the Curability, of Insanity. To what extent this disease can be or is actually cured, there has been a wide difference of opinion, as you well know, even among expert writers on the subject. Your facts, statistics, and conclusions must go far to settle this question, that the percentage of cures has been rated altogether too high.

"Had your paper been placed in my hands many years ago, it would have saved me much labor and trouble." 1

It is a consolation to believe that many other writers could truthfully make the same acknowledgment as that expressed in Dr. Allen's closing paragraph.

"I have just read your report," writes an active member of the board of charities of a distant State, "and cannot refrain from writing a few lines to express my great satisfaction with your most valuable discussion of the curability of insanity."

An eminent physician, a professor in a medical school in another and remote State, says, "Your chapter on the curability of insanity is most instructive and full of interest. If the misstatements of general practice could be illumined by the same light which you have thrown upon your special labor, there would be more ground for hope of a useful and honorable future for medicine."

Another physician, well-known for his interest and his labors in the broad field of science which includes the great questions of public welfare, writes as follows:—

"Your statement of the curability of insanity, and your analysis of the reported cures of insanity in asylums, is, in my opinion, a valuable public service. When the public learn that asylum superintendents desire to state the truth, and not merely to communicate what information they—the superintendents—think it is best for the public to know, popular distrust of asylums will cease."

Let not the reader too hastily infer, from the last sentence of this extract, that there is a conspiracy among the superintendents, the object of which is to mislead public opinion in regard to the subject under discussion. Letters of approval have reached me from a no inconsiderable number of those superintendents. One of them, who is well and widely known as the successful chief officer of one of the largest State institutions, thus expresses his views:—

"I write to satisfy an impulse that has had possession of me for some time; and that is, to say how much gratified I was with your last report, and your article on the curability of insanity. You are undoubtedly right in the views expressed as to the unreliability of the cures reported by almost all the hospitals. If all the statistics were sifted as thoroughly as you have sifted a few of them, I am afraid the percentage of cures would prove exceedingly small."

Another, who has likewise long presided over a large State hospital, writes as follows: "Accept my thanks for your argument and conclusions in relation to the curability of insanity embodied in your last report. I had arrived at the same figures, but have been not a little embarrassed by the statistics of others. The matter is clear now."

"It has been a wonder to me," writes a third, equally well-known as the efficient head of still another among the largest State institutions, "that members of the profession have not spoken as plainly before now, as you have done in your report last issued."

It might not inappropriately be asked, why has he not done it himself? He is abundantly able to grapple with the subject, but his memory does not reach so far into the past as that of some other persons; and peradventure his facilities for reference to the earlier reports are less extensive.

"I am very much pleased with your report," writes an exsuperintendent of yet another of the large State hospitals. "Your exposure of some practices and fallacies was eminently proper."

No one of the institutions above mentioned is in New England; and no two of them are in the same State. No person, indeed, who has been quoted, with the single exception of Dr. Allen, resides upon this side of the Hudson River, and some of them are far beyond it. In regard to the superintendents of hospitals in the six Eastern States, it is sufficient to say that the paper, fuller and more nearly complete than it appears in the report, was read at a meeting of the New England Psychological Society, when six of them—five beside the writer—were present, and that, by a unanimous vote, they directed that it be printed.

Our thanks are due to the publishers of "The Christian Register," for one copy, weekly, and to the publisher of "The Staaten-Zeitung" for two copies, weekly, of those papers; and to Dr. J. B. Stoddard for a large quantity of back numbers of "The Independent."

Two changes have occurred within the year, in the office

of Second Assistant Physician. Dr. Garlick left, early in November, to pursue his medical studies in the Harvard School, preparatory to an entrance upon general practice; and Dr. Kimball, his successor, left in April, to assume the duties of Assistant Port Physician in Boston. In the performance of their work while here, they merited and received my cordial approbation. Dr. Daniel Pickard has been with us six months, and thus far has proved himself competent for the position.

One change has taken place in the corps of subordinate officers, Miss Halladay having left the office of laundress to take charge, in a neighboring State, of a smaller but more independent institution, and her place being filled by Miss Nell Russell. They are both commendable for industry, faithfulness, and strict attention to their own work, without intermeddling with the affairs of others.

To the continued watchfulness, industry, and general faithfulness of the other officers, both primary and subordinate, am I in large measure indebted for the favorable results of the year.

Thus closeth the fourteenth annual report which it has been my lot - a pleasant lot let it be acknowledged - to render to your honorable Board. I shall curb my pen to the inditing of but few words at this milestone of the road which you and I have so long travelled together, - a majority of you more than thirteen years; but, lest no other opportunity may offer, I desire here to place upon record the fact, that, of the multitude of propositions for the improvement or the management of this institution, which I have presented for your consideration and action during that period, every one has met your approval; and not only so, but, further and better still, I have your assurance that no one of them received even one negative vote. Not for this alone, but for the existence of that harmony and cordiality and unity of purpose which the fact truthfully suggests, I shall never cease to be gratefully thankful.

Respectfully submitted,

PLINY EARLE, Superintendent.

Northampton, Oct. 3, 1877.

APPENDIX.

TABLE No. 1.

Admissions, 1876-77.*

		DIRECT (11	OM OTH		TOTALS.			
MONTHS.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
October, 1876	5	1	6	9	6	15	14	7	21	
November	5	8	8	- :	-		5	3	8	
December		2	4	l – .	2	2	2	4	6	
January, 1877 .	2	4	6	ß	6	12	8	10	18	
February	1 9 1	8	5	1	_		2	3	5	
March		4	4	_	8	8	-	12	12	
April	1	2	3	10	-	10	11	2	13	
May	6	5	11	1	_	1 1	7	5	12	
June	9	3	в	-	11	11	3	14	17	
July	1 1	2	6	_	_ :	_ '.	4	2	6	
August	1 7	8	15		_	_ :	7	8	15	
September		1	6	-	-	-	5	1	6	
Totals.	42	38	80	26	83	59	68	71	139	

^{*} This table, in accordance with its caption, includes the number of admissions, which is larger by five than the number (134) of persons admitted. Several of the succeeding tables include the latter alone.

TABLE No. 2. Discharges, 1876-77.

			Dibect.	•	,	E CHAR		,	Totals	•
MONTHS.		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
October, 1876 November . December . January, 1877 February . March . April . May . June . July . August . September .		5 6 4 3 1 5 1 3 4 8 3 4	8 4 8 4 6 7 2 10 6 4 7	8 10 7 7 7 12 3 13 10 12 10 8	- 4 - 1 - 8 - 3	- 1 - 1 - 4 1 - 2	- 5 - 2 - 7 1 - 5	5 6 8 3. 1 6 1 6 4 8 6 5	3 4 4 4 6 8 2 14 7 4 9 4	8 10 12 7 7 14 3 20 11 12 15 9
Totals .	•	47	60	107	12	9	21	59	69	128

TABLE No. 3.

Daily Average Number of Patients in the Hospital, 1876-77.

)	4 O N T	H 8.			Males.	Females.	Total.
October	. 18	76.				221.68	243.90	465.58
Novemb					. 1	230.40	247.16	477.56
Decemb	er				. 1	222.26	246.32	468.58
January	, 18	77.			.	223.61	250.45	474.06
Februai	.					228.00	252.60	480.60
March	٠.				. 1	223.84	251.58	475.42
A pril					. 1	226.07	254.33	480.40
May					. !	232.13	246.22	478.35
June					. 1	231.90	249.23	481.13
July					.	230.74	250.35	481.09
August						227.74	248.84	476.58
Septem			•			228.57	246.83	475.40
Ave	erag	e for	the y	ear		227.21	248.98	476.16*

^{*} These totals were obtained by a division of the sums of daily residence, for the year, by 365, the number of days in the year.

TABLE No. 4.

Relation to Hospitals of the Persons Admitted, 1876-77.

	Males.	Females.	Total.
Never before in any hospital	29	32	- 61
Former inmates of this hospital	6	9	15
of other hospitals in this State	25	23	4 8
of hospitals in other States, of this hospital, and of other	1	-	1
hospitals in this State .	4	2	6
of this hospital, and of hospitals in other States . of other hospitals in this	1	1	2
State, and of hospitals in other States of this hospital, of other hospitals in this State,	-	-	-
and of hospitals in other States	1	_	1
Total of persons	67	67	134

TABLE No. 5.

Residence of the Patients Admitted, 1876-77.

		cot	JNTI	ES.			İ	Males.	Females.	Total
Hampshire							. }	4	11	15
								19	11	80
Franklin							. !	5	6	11
Berkshire							.	7	8	15
Suffolk					• •		.	16	11	27
Worcester	-	-		·			.	5	4	
Bristol		•	•	·		·	. i	4	i	9 5
Middlesex		·	·		-			š	12	15
Essex .	-	•	•	•		· ·	.	š	3	6
Plymouth	:	·	:	÷				ĭ	_	ĭ
Totals							.	67	67	134

TABLE No. 6.
Nativity of the Patients Admitted, 1876-1877.

	T A K	IVI	TY.				Males.	Females.	Total.
Maine							3	_	3
New Hampshire							-	4	4
Vermont .							. 1	2	3
Massachusetts							29	20	49
Connecticut							2	3	5 1
Rhode Island							1	- 1	1
New York .							1	2 1	3 1
Virginia .							4	1	1
South Carolina							1	-	ī
Alabama .				•			1	-	1
Total of Ar	neric	ans					39	32	71
Nova Scotia				_	_		1	_	1
Prince Edward	Islan	ď.	·	•	·		_	1	ĩ
Cape Breton		.	-	-	•		i		ī
Western Islands		•	•		·		ī		ī
Brazil			•		·		ī	_	ī
reland .							17	27	44
Scotland .	·			-			1	i i !	2
England .					·		3	4	7
Germany .					•	. 1	_	1	i
Prussia.							1	_	1
Hungary .							1	_	1
italy	•		•	•			1	1	2
Total of for	oion	220					28	35	63
of An	orgin	ans	•	•	•		39	32	71
OI All	16116	19110	•	•	•	. [
of per	sons					.	67	67	134

TABLE No. 7.

By what Authorities Committed, 1876-77.

AUTHORI	TIES	3.		Males.	Females.	Total.
Probate Court	•		-	30	25	55
Overseers of the Poor .				2	6	8
Board of State Charities				27	33	60
Friends				6	8	9
Governor's Order .	•			1	_	1
Superior Court			•	1	_	1
Total of persons .			•	67	67	134

TABLE No. 8.

Ages of the Patients Admitted, 1876-77.

A (ES	•			Males.	Females.	Total.
Fifteen years and und	ler				_	-	_
From 15 to 20 years					4	3	7
20 to 25 years		•			11	6	17
25 to 30 years					9	6	15
30 to 35 years					4	15	19
35 to 40 years	•		•	.]	11	9	20
40 to 50 years					14	11	25
50 to 60 years				.	7	10	17
60 to 70 years		•			5	4	9
70 to 80 years			•		1	8	4
Unknown			•	• [1	-	1
Total of persons	•	•	•		67	67	184

TABLE No. 9. Relation to Marriage of the Patients Admitted, 1876-77.

		CON	DIT	ON.		Males.	Females.	Total.
Married		•	,.	•	•	25	32	57
Single.		•			•	37	21	58
Widowers					•	3	_	3
Widows						-	13	13
Divorced				•	•	-	1	1
Unknown		•	•		•	2	_	2
Total	of pe	erson	8 .	•	•	67	67	184

TABLE No. 10. Occupations of the Men Admitted, 1876-77.

	-			 	ř – – –			===		==
Laborers				17	Tailor .					1
Farmers				 7	Weaver .			•	:	1
Carpenters				3	Saloon-keep	er		•		1
Shoemakers				3	Spinner .			•		1
Machinists				3	Lawyer .					1
Sailors .				3	Clerk .					1
Peddlers				2	Mason .					1
Students			•	2	Polisher					1
Stone-mason	3			2	Salesman			•		1
Mill operative	es			2	Tinner .		•			1
Printers.				2	Locksmith		•			1
Physicians		•		1	Literary		•	•		1
Waiter .				1	None .					4
Currier .				1	Unknown		•			1
Cabinet-mak	er			1	Total					67

Table No. 11.

Alleged Causes of Insanity of the Patients Admitted, 1876-77.

•	CAUS	E 8.				Males.	Females.	Total
	Ment	al.						
"Trouble" .					.	2	3	5
Domestic affliction					. 1	_	2	2
Religious exciteme	ent .		•		. !	2	2	4
Pecuniary loss .						2	1	3
Business trouble.						1	' - i	1
Nostalgia		•			.	1	i - !	1
Hard study			•		• ¦	2	- '	2
Mental overwork .			•	•	• ¦	1	-	1
Total of ment	al .				٠	11	8	19
	Physic	al.			ì		' ! ! .	
Intemperance .	•			•	.	12	8	20
Opium eating .			•		.	-	1	1
Masturbation .	•					3	-	3
Injury of the head					• ;	3	2	5
Sun-stroke		•			-	1	-	1
Ill health		•			.	4	13	17
Frequent child bea	ring				.	-	2	2
Puerperal					• !	-	5	5
Menopause		•			• [-	3	3
Epilepsy					- ;	7	2	9
Neuralgia					. :	-	1	1
Soarlet fever .					. 1	1	! - '	1
Overwork				•	. }		2	2
Total of physi	cal.	•	•	•	•	.31	39	70
Total of ment	al.	•	•	•	• .	11	8	19
Unknown .	•	•	•	•	• [25	20	45
Total of perso	ns .					67	67	134

TABLE No. 12.

Duration of Disease before Admission, 1876-77.

DUB	ATI	ON.				Males.	Females.	Total
Under 1 month .		•		•	•	5	6	11
From 1 to 3 months		•				3	8	11
8 to 6 months		•				7	8	10
6 to 12 months				•		6	6	12
1 to 2 years	•		•	•		7	8	15
2 to 5 years		•	•			8	11	19
5 to 10 years			•			7	8	15
10 to 20 years		•				4	1	5
Over 20 years .			•			1	2	8
Unknown					.	19	14	33
Total of persons						67	67	184

TABLE No. 13.

Age at first Attack of Insanity, 1876-77.

A	G E S	•		i	Males.	Females.	Total
Fifteen years and un	der				2	1	3
From 15 to 20 years					10	3	18
20 to 25 years			•		3	3	6
25 to 30 years				.]	7	8	15
80 to 35 years				.	4	13	17
35 to 40 years		. •		.	3	4	7
40 to 50 years			•		4	9	13
50 to 60 years			•	.	2	3	5
60 to 70 years				.	1	-	1
Unknown				.	31	23	54
Total of persons		· •			67	67	134

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TABLE No. 14.

Status of the Patients Admitted, 1876-77.

HOW SUPPORTE	D.			Males.	Females.	Total.
As first admitted.						
Supported by State				28	26	54
by towns and cities				28	35	63
by individuals .	•	•		11	6	17
Total of persons				67	67	134
Of the same patients as at pre- discharged.	sent,	or w	hen		' 	
Supported by State			.	27	24	51
by towns and cities			. [30	37	67
by individuals .		•		10	6	16
Total of persons				67	67	134

Table No. 15. Deaths, 1876-77.

C A	USES	O F	D E A	TH.			Males.	Females.	Total.
	Nerrou	ıs S	ystem.						
Epilepsy .			•				3	2	5
Paralysis .						.	5	- 1	อี
Exhaustion of	chroni	c m	ania			. [2	1 1	3
Paresis .							1	1	2
Apoplexy .							_	1	1
	Dage	inal						1	
Phthisis .	Resp	ıraı	ory.			İ	8	10	18
Pneumonia .	•	•	•	•	•	•	0	2	70
rneumonia.	•	•	•	•	•	•	_	1 2 !	2
	Circ	ulate	ory.					l i	
Heart disease						.	_	2	2
Pyæmia .			•			.	-	1	1
	Dia	estiv	10					1	
Chronic diarrh						. 1	_	1	1
		•		•	•	•		<u> </u>	•
•	Ge	nera	ıl.				_	i	_
Dropsy	•.		•	•	•		1	!	1
Accidental dro	wuing	•	•	•	•	•	1	· -	1
Total .						ŀ	21	21	42

TABLE No. 16.

Number and Status of Patients at the close of each Week in the Year, 1876-77.

D A	TE.	State.	Town.	Private.	Total.	DATE.	State.	Town.	Private.	Total
18	76.					1877.				
Oct.	7,	252	148	63	463	April 7,	254	162	61	477
	14,	254	146	63	463	14,	253	162	61	476
	21,	255	147	64	466	21,	261	165	61	487
	28,	262	152	63	477	28,	260	165	61	486
Nov.	4,	262	152	64	478	May 5	257	161	61	479
	11,	263	152	65	480	12	255	163	60	478
	18,	262	154	61	477	19	256	161	60	477
	25,	262	154	60	476	26	257	162	59	478
Dec.	2,	260	153	60	473	June 2	256	163	59	478
	9,	260	152	58	470	9	255	164	59	478
	16,	257	151	59	467	16	255	164	59	478
	23,	257	151	59	467	23	259	171	59	489
	3 0,	258	152	59	469	30	257	169	58	484
18	77.					July 7	257	168	59	484
Jan.	6,	255	154	59	468	14	253	170	58	481
	13,	254	155	59	468	21	254	169	58	481
	20,	259	162	59	480	28	251	168	59	478
	27,	258	162	59	479	Aug. 4	250	168	60	478
Feb.	3,	258	163	60	481	11	245	170	60	475
	10,	258	164	60	482	18	245	170	60	475
	17,	258	163	60	481	25	245	173	60	478
	24,	257	164	59	480	Sept. 1	244	174	59	477
March	ı 3,	257	162	59	478	8,	244	173	58	475
	10,	257	159	60	476	15,	244	173	59	476
	17,	257	155	60	472	22,	241	173	61	475
	24,	256	160	59	475	29,	241	173	61	475
	31,	255	161	60	476					

WEEKLY AVERAGE.

State patients .				. 254.84
Town patients.				. 161.58
Private patients				. 60.02
TP-4-1				A78 AA

. . 476.44
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TABLE No. 17.

Classed Average of Patients.

OFFIC	IAL	YEAR	.	State Patients.	Town Patients.	Private Patients.	Total.
Month	ly A	verag	e.				
1864-65				225.10	48.16	69.83	343.25
1865-66				252.16	50.58	75.58	378.33
Weekl	y A	verage	·.				
1866-67				261.96	49.46	89.75	401.17
1867-68				262.65	47.92	103.06	413.63
1868-69				248.52	54.98	101.46	404.96
1869-70		•.		236.19	65.04	107.23	408.46
1870-71				234.10	77.07	118.38	429.55
1871–72				226.96	89.57	112.27	428.80
1872-73				248.02	99.23	90.	437.25
1873-74				284.48	102.88	82.06	469.42
1874-75		•		274.35	128.34	72.46	475.15
1875-76				259.19	146.02	68.94	474.15
1876-77		•		254.84	161.58	60.02	476.44

TABLE No. 18.

Monthly Consumption of Gas.

			MON	т н s.					Cubic Feet.	Daily Average
			18	76.						
October									35,800	1.154.83
November									40,250	1,341.66
December							•		45,400	1,464.51
			18	77.						
January						_			41,100	1,325.80
February		-			-		-		31,150	1.112.50
March									27,650	891.93
April .						•			18,400	613.33
May .									13,000	419.35
June .				-	-		-		10,550	351.66
July .							-	-	12,000	387.09
August									13,750	443.54
September	•		•	•					20,650	688.33
Totals	3								309,700	849.54

TABLE No. 19.

Annual Cost of Gas.

	Y	EAR.	•			Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860-61.		•				\$ 2,030 39	314.26	\$ 6 4 6
1861–62,.		•				2,085 29	313.80	6 64
1862–63.	•				•	2,109 02	355.63	5 93
1863–64 .	•					2,069 79	357.63	5 78
1864–65.						1,653 05	342.40	4 82
1865–66 .		•	•			1,107 98	376.35	2 94
1866–67 .	•					1,056 16	401.03	2 63
1867–68 .						1,022 51	413.41	2 47
1868–69 .						903 92	405.10	2 23
1869–70 .		•				915 30	408.83	2 23
1870–71 .						1,043 99	421.90	2 47
1871-72 .						980 94	428.72	2 28
1872–73 .						1,006 61	437.23	2 30
1873–74 .						1,066 74	469.54	2 27
1874–75 .		•		•	•	1,012 63	475.35	2 13
1875–76 .		•	•	•		1,089 82	474.21	2 29
1876–77 .						1,033 59	476.16	. 2 17

The hospital has always been supplied with gas by the Northampton Gas-Light Company, at the uniform price, under special contract, of three dollars and twenty-five cents (\$3.25) per thousand cubic feet, with an additional charge for meter-rent.

TABLE No. 20. Supplies for the Year 1876-77.

Compe.		-	က	Ø	ı	က	4	တ	တ	8		I	ı	23	1
.extro¶		1	ī	ı	ı		1	I	ı	31		1	1	1	
Кијтен.		١	ŧ	1	ಬ	1	ı	ı	1	ÇI		က	ı	ı	1
Савсетв.		ı	ī	ī	-	ı	ī	ī	1	1		ı	-	1	1
Syrup Curs.		-	-	١	1	1	1	1	1	1		1	ı	ı	1
Рітсретв.		_	ÇI	1	1	_	١	1	1	1		1		-	_
.еГwоя		9	#	1	સ	<u></u>	<u>ः</u>	9		<u>01</u>					1
Мидя.		1	4	~		10	18	9	1	1		9	9,	4	<u> </u>
Tumblers.		88	20	63	1	l 	ı	1	1	1		9	18	1	ı
гизопич		12	9	9	18	9	30	1	18	9		9	18	읩	l
Cuper		1	18	6	ı	1	ı	ı	ı	1		9	9	18	2
l'lates.		9	9	10	1	1	4	9	13	Н		18	9	9	9
Carpet Stripe.		10	ı	ı	4	. 1	C)	CI	ı	١		ı	8	ŀ	:0
Hair Brüshes.		-	-	C.I	ı	ł	ı	Çŝ	ı	1		ī	i	ī	ī
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TABLE No. 20 — Continued.

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Middle 1st Hall	2d Hall	3d Hall	4th Hall	Lower 1st Hall	2d Hall	3d Hall	4th Hall	Kitchen .	Rear	Centre	Aggregate

Table No. 21.

Trustees of the Northampton Lunatic Hospital.

NAME.	Residence.	When app'ted.	Service ended.	From what cause.
Charles E. Forbes .	Northampton .	1856	1857	Term expired.
Lucien C. Boynton .	Uxbridge	1856	1858	do. do.
Elïphalet Trask .	Springfield	1856	1875	do. do.
John C. Russell .	Great Barrington.	1856	1859	Resigned.
Horace Lyman	Greenfield	1856	1857	Removed.
Charles Smith	Northampton .	1857	1860	Resigned
Luther V. Bell	Somerville	1857	1859	do.
Zebina L. Raymond.	Greenfield	1858	1859	do.
Franklin Ripley .	Greenfield	1859	1860	Died in office.
Edward Dickinson .	Amherst	1859	1864	Resigned.
Walter Laffin	Pittsfield	1859	1866	Term expired.
Silas M. Smith	Northampton .	1860	1863	do. do.
Charles Allen	Greenfield	1860	1861	Resigned.
Alfred R. Field .	Greenfield	1861	1864	do.
Edward Hitchcock .	Amherst	1863	-	Still in office.
Silas M. Smith	Northampton .	1864	-	do. do.
Edmund H. Sawyer.	Easthampton .	1864	_	do. do.
Henry L. Sabin .	Williamstown .	1866	1876	Term expired.
Adams C. Deane .	Greenfield	1875	-	Still in office.
Henry W. Taft	Pittsfield	1876	_	do. do.

Table No. 22.

Number of Persons, other than Officers, employed in the regular duties of the Hospital.

ос	CUP	AT	IONS	3.			Males.	Females.	Total
Supervisors.	•	•	•	•			. 1	1	2
Assistant Superv	isors		•				-	1	1
Assistant Clerk			•				-	1	1
Seamstress .							-	1	1
Assistant Seams	tress	•					-	1	1
Laundress .			•			. !	-	1	1
Assistant Laund	ress		•			.	-	1	1
Baker		•	•		٠.		1	-	1
Assistant Baker	•		•		•		1	_	1
Steward .						•.	1	-	1
General Attenda	nts						11	15	26
Housework, cent	re bu	iildi	ng				-	3	8
Cook		•					-	1	1
Assistant Cooks		•		•			1	3	4
Watchman .		•		•			1	_	1
Carpenters .	•			•			8	-	8
Painter .				•			1	-	1
Assistant Engine	er			•			1	_	1
Hostler :				•			1	_	1
Paver and Lawn-	-dres	ser	•	•			1	-	1
Farmers .	•						7	-	7
Totals .							31	29	60

TABLE No. 23.

Days' Work by Patients, 1876-77.

MONTHS.	FARM.		Kitchen.		SEWING- ROOM.		Laundry	•
MUNINS.	Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total
1876.	<u> </u>							
October	598	124	220	344	222	11	262	278
November .	501	120	212	332	249	11	284	295
December .	398	124	216	340	241	11	276	287
1877. January	394	124	221	345	266	11	264	275
February.	338	112	198	310	133	10	240	250
March	426	124	214	338	251	11	276	287
April	442	120	214	334	240	10	252	262
Мау	452	124	222	346	232	19	209	228
June	474	120	211	331	237	22	242	264
July	537	124	211	335	225	22	220	242
August .	639	124	209	333	230	27	269	296
September .	584	120	200	320	232	20	240	260
Totals .	5,783	1,460	2,548	4,008	2,758	185	3,034	3,219

The total of days' work here recorded is 15,768. This is what was performed by the regular workers on the farm and in the three departments mentioned. No record was kept of the work on the ornamental grounds, at the stable, in the bakery, the boiler-room, and the carpenter's shop. A large amount of other work is done, both in the halls, and, at irregular times, out of them.

TABLE No. 24.

List of Articles made in the Sewing-room, 1876-77.

	•			287	Sheets				229
				54	Pillow-cases .			•	403
		•		227	Bed-spreads .				3
				140	Bed-spreads (hem	med)	٠.		73
28				31	Bolster-cases.				23
			•	17	Towels				257
				187	Carpets (hemmed)			5 8
				32	Mattress-ticks			•	86
efs (hemr	ned)		2	Roller-towels				72
ned)				60	Table-cloths .				19
				94	Pillow-ticks .				49
				334	Straw-ticks .				35
				25	Clothes-bags.				27
		•		7	Napkins (hemme	i)			24
(pair	rs)			121	Sundries				4
		•	•	51	Articles repaired	•		22	,245
	efs (laned)	efs (hemr	efs (hemmed)	efs (hemmed)		Pillow-cases Pillow-cases Bed-spreads Bed-spreads Bed-spreads Bed-spreads (hemes 31 Bolster-cases 17 Towels Towels Carpets (hemmed 32 Mattress-ticks Roller-towels Mattress-ticks Pillow-ticks Pillow-ticks 334 Straw-ticks Straw-ticks Clothes-bags Napkins (hemmed Capirs Napkins (hemmed Capirs Sundries Capirs Pillow-cases Pill	Pillow-cases Pill	140 140	

TABLE No. 25. Upholstery done in 1876-77.

Hair Mattresses made, new materials					10
Hair Mattresses made, new ticks .					24
Hair Pillows made, new materials .					39
Hair Pillows made, new ticks					27
Husk Mattresses made, new materials					46
Husk Mattresses made, new ticks .					12
Husk Mattresses made, new husks .			•		42
Husk Pillows made, new materials .					8
Hair Mattresses re-made, hair re-picked	ι.				53
Hair Pillows re-made, hair re-picked					22
Husk Mattresses overhauled, with incre	ase o	f hus	ks		46

The husks were split and the hair picked in the house.

TABLE No. 26.

Officers and Employés. Time Employed. March 1, 1877.

. NAME.	Years.	Months.	Days.
Pliny Earle, M.D., Superintendent	12	7	26
Edward B. Nims, 1st Assistant Physician .	8	2	14
William G. Kimball, 2d Assistant Physician	~	3	17
Walter B. Welton, Clerk	11	_	14
Asa Wright, Farmer	19	3	_
Danford Morse, Engineer	12	· -	7
Jeremiah E. Shufelt, Supervisor	13	2	4
Lucy A. Gilbert, Supervisor	10	- :	18
F. Josephus Rice, Steward	18	4	24
Mary Ward, Seamstress	6	6	3
Isabelle Halladay, Laundress	3	4	25
Charles Ziehlké, Baker	14	6	_
Frances C. Earle, Assistant Clerk	5	3	6
Annie L. White, Assistant Supervisor .	5	8.	23
Ada Ward, Assistant Seamstress	1	2	· -
Ellen Halladay, Assistant Laundress	3	4	25
Perry Davis, Attendant	7	4	16
Robert H. Gallivan, Attendant	3	10	11
Thomas Powers, Attendant	2	11	11
Alfred J. Cusson, Attendant	2	10	14
James Neil, Attendant	1	11	6
James Ahearn, Attendant	1	10	_
Charles S. Johnson, Attendant	1	8	1
Walter Pillinger, Attendant	2	9	29
John Ahern, Attendant	_	-	20
Richard Neill, Attendant	_	-	19
David Mercier, Attendant	_	-	14
Erastus Dickinson, Attendant	_	-	12
Agnes S. Wilson, Attendant	18	6	19
Isabella S. Johnston, Attendant	8	11	5
Maria E. Graves, Attendant	9	1	7
Louanna Payne, Attendant	8	8	26
Hannah Merrifield	3	5	25

TABLE No. 26—Continued.

NAME.	Years.	Months.	Days.
Martha R. Harris, Attendant	2	6	7
Jane McGuire, Attendant	1	10	3
Ella Doolan, Attendant	1	6	27
Mary H. Huggins, Attendant	1	6	12
Atlanta J. McPhee, Attendant	1	5	12
Nellie Henchey, Attendant	1	2	2
Mary Ransome, Attendant	1	3	15
Victoria S. Shumway, Attendant,	-	8	9
Cora Woodward, Attendant	_	4	10
Cécile Riel, Attendant	-	4	23
Ida White, Cook	3	6	21
Emma Tower, Assistant Cook	1	_	6
Emma Valcour, Assistant Cook	_	6	23
Julia B. Haskell, Assistant Cook	-	8	2
William Lacore, Assistant Cook	3	10	24
Harriet Aldrich, Centre	2	5	14
Elizabeth S. Welton, Centre	6	11	5
Harriet Halladay, Farmer's dining-room .	2	7	11
William C. Hall, Assistant Engineer	11	5	17
Nicholas Riel, Night Engineer	1	2	25
Andrew N. Thorington, Watchm'n, (temp'y)	6	1	30
Sifroi Belville, Carpenter	6	10	7
Waldy Tetro, Carpenter	3	11	. 23
Alfred Parenteau, Painter	11	6	18
Orson J. Hill, Hostler	_	10	2
Hugo Smith, Assistant Baker	-	8	12
James Madden, Paver and Lawn-dresser .	3	10	_
Benjamin Rockwell, Assistant Farmer .	9	. 9	_
John Mercier, Assistant Farmer	9	8	_
Eugene Sullivan, Assistant Farmer	4	10	_
Herbert Persons, Assistant Farmer	2	10	_
William Commier, Assistant Farmer	_	6	14

Eleven of the persons have not been in their present situations during the whole period of service. For examples, the supervisors, the assistant supervisor, and the seamstress, were formerly attendants.

Seven of the persons have been employed more than once. In these instances the table gives the total time of service.

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TWENTY-THIRD ANNUAL REPORT

OF

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT

NORTHAMPTON,

FOR THE TRAK ENDING

SEPTEMBER 30, 1878.

BOSTON:

Band, Aberg, & Co., Printers to the Commonwealth,
117 Franklin Street.
1879.

OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

SILAS M. SMITH, Esq. . . . Northampton.

ADAMS C. DEANE, M.D. . . Greenfield.

HENRY W. TAFT, Esq. . . Pittsfield.

HON. EDMUND H. SAWYER . . Easthampton.

EDWARD HITCHCOCK, M.D. . . Amherst.

RESIDENT OFFICERS.

PLINY EARLE, A.M., M.D. Superintendent.

EDWARD B. NIMS, M.D. . . . First Assistant Physician.

DANIEL PICKARD, M.D. . . . Second Assistant Physician.

WALTER B. WELTON Clerk.

ASA WRIGHT Farmer.

DANFORD MORSE Engineer.

TREASURER.

PLINY EARLE Northampton.

Office at the Hospital.

SUBORDINATE OFFICERS.

Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor of the Commonwealth and the Honorable Council.

In fulfilment of the law, we have the honor to present to you the Twenty-third Annual Report of the Northampton Lunatic Hospital.

At the close of the official year 1876-77, 475 patients remained in the hospital: 229 of them were men, and 246 women. In the course of the year just ended, 40 men and 36 women, a total of 76, have been admitted: hence the whole number under treatment within the official year was 551; of whom 269 were men, and 282 women. The number discharged was, of men, 40; women, 59; total, 99. Of deaths there were 23; 14 of them being of men, and 9 of women.

At the close of the year, Sept. 30, 1878, 215 men and 214 women, a total of 429, remained in the hospital. The largest number of patients on any day in the year was 476,—on the 26th of October, 1877; and the smallest number, 429,—on each of four successive days in June, 1878. The average daily number for the year was a fraction over 442.

Of the 99 patients who left the hospital, 26 were recorded as recovered, 44 as improved, and 29 as unimproved.

Freedom from fatal or serious personal accident, from suicides, and from all untoward or detrimental events which might in any way materially mar the prosperity of the institution; exemption from epidemic or other serious acute disease; an unusually low death-rate; a reduction of the number of resident patients to an extent which has contributed to the comfort of the whole household; and a continuance of

improvements upon the premises, rendered practicable by a favorable financial condition, — are the leading characteristics of the progress of the institution through the official year just closed.

The regular monthly meetings of our Board, as required by the By-Laws, have been duly held. The sum of regular visits to the hospital by the members of the Board in the course of the official year is nearly twice as large as the law requires; and as occasional visits at irregular times, by some member of the Board, have not been infrequent, we believe that inspection of the institution has been sufficiently constant and thorough.

As the farm existed one year ago, there were two small tracts of land that jutted into it, destroying its symmetry, and preventing desirable improvements. We have since purchased both of them. The farm now contains about three hundred and thirty-two acres; and, unless the circumstances of the hospital should be essentially changed in future years, no more land will be needed.

In our next preceding annual report, it was stated that a contract had been made with the Healey Iron-Works for an iron fence running "westerly from the entrance-gate along the boundary of the road, a distance of over 2,200 feet, to the corner of the land of Mr. Fowle." The contract was fulfilled in the course of the last autumn. After the Fowle lot was purchased, it was decided to extend the fence along the front of it, a distance of 235 feet, to the foot of the hill. This, also, has been done.

From the point where the iron fence ends, at its western extremity, the land has been graded upon the ascent of the hill, the road relaid, with some change of course, and a wooden picket-fence built along its line to the western extremity of the farm, a distance of 1,681 feet. From this point, a similar fence has been constructed across the western boundary, where the farm adjoins the land of the late Hiram Mann, a distance of 1,956 feet. The extent of fence, both boundary and division, which has been erected within the year, is as follows: of iron, 2,437 feet; wooden picket, 4,870 feet; board rail, 1,726 feet; total, 9,033 feet, or nearly one mile and three-quarters. Of all the fences standing upon the farm and its boundaries, as the farm was twelve years ago, not a rod is now left.

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Much labor in cutting wood and brush, and in grubbing, has been bestowed upon the ninety-acre lot which was purchased of Enos Clark. When properly subdued, it will make a good and sufficient pasture.

The original fence of the ox-yard on the north side of the barn having become much worn, it has been replaced by a wall of solid stone masonry.

The two lots of land purchased, and all of the improvements mentioned, were paid for from the earnings of the hospital.

A new ice-house, thirty feet square, and sixteen feet to the eaves, has been erected this summer as a substitute for the old one, which has become so frail that it cannot be safely trusted for the service of another year.

The charges for the board of patients in the course of the year are as follows:—

For State patients Town patients Private patients	•	•	•		•	\$38,681 31,951 14,928	00
Total						8 85,560	

The report of the Treasurer, herewith presented, contains a summary account of the receipts and the disbursements of money, together with the certification of the auditors that all entries are furnished with vouchers.

The balances show, that at the close of the official year, Sept. 80, 1878, there were, —

Cash assets available for future use And liabilities (bills payable)		\$34,708 72 7,117 84
Balance in favor of the hospital .		\$27,590 88

Aside from the cash assets, the hospital has in store purchased provisions and supplies to the value of \$11,019.57, and all of the hitherto unconsumed products of the farm and the garden.

All the officers, both principal and subordinate, are the same as at the beginning of the year. They have rendered another year of satisfactory service, and sustained the insti-

tution in such condition that we may confidently recommend it to persons in need of its ministrations.

SILAS M. SMITH.
ADAMS C. DEANE.
HENRY W. TAFT.
EDMUND H. SAWYER.
EDWARD HITCHCOCK.

NORTHAMPTON, Oct. 12, 1878.

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

The financial accounts, for the official year 1877-78, of the institution under your charge, are now closed and balanced. The receipts and their sources, as well as the disbursements, with the purposes for which the money was paid, are presented in the following summary:—

RECEIPTS.

Balance in hand Received for box Received for box	ird an ird an ird an	id cor id cor id cor	ting ting ting	gencie gencie gencie	es of tes of	priva town	patie	nts	•	\$4,951 15,808 84,630 41,133	54 18 92
Received for ani				&c.,	sold	•	•	•	•	528	
Received for sur	idry a	ccou	its	•	•	•	•	•	•	1,418	49
Total .	•	•	•	•	٠	•	•	•		\$98,466	69
•			Dr	8BUR	SEME:	nts.					
For provisions a	nd su	pplies	١.				•			\$ 25, 4 98	40
fuel .		•			•		• •		•	2,281	81
gas and oil	•			•		•	•	•		1,124	34
water .										800	00
salaries and	wage	8					•			21,786	78
medical sup	olies	•						•		1,283	71
furniture, be	ds, a	nd be	ddir	ng						1,909	04
clothing and	dry-	goods		•				•		8,910	24
contingencie		•								1,255	15
farm .	•									4,673	82
farm stock										825	00
farm wages					•			•		4,070	25
real estate	•	•		•	•	•	•	•		1,400	00
Amount c	arried	forw	ard							\$ 70,818	04

Amou	nt broug	ht for	rward							\$ 70,813 04
For iron fen										7,550 63
other im	proveme	nts a	nd rej	pairs			•			5,306 56
miscella	neous ex	pens	es .	•				•	•	1,277 28
Balance in	hands o	of ta	easure	er, i	aclud	ing	Unite	d-Sta	tes	
bond,	Sept. 30	, 187	8.	•	•	•	•	•	•	13,519 18
Total .		•	•	•		•	•	•	•	\$ 98,466 69
							PLI	NY	EA	RLE,
										Treasurer.

NORTHAMPTON, Oct. 12, 1878.

We have attended to the duty of our appointment as auditors of the accounts of the treasurer of the hospital, and have found all entries sustained by proper vouchers.

ADAMS C. DEANE. SILAS M. SMITH.

NORTHAMPTON, Oct. 12, 1878.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

Called upon once more to furnish you with an annual account of the proceedings and progress of the institution intrusted to your direction and supervision, I enter upon the duty by a presentation of a numerical compend of the operations of the year, so far as relates to the primary object for which the hospital was founded.

GENERAL STATISTICS, 1877-78.

Based upon the Number of Admissions, and not of Persons.

							Males.	Females.	Total.
Patients in ho	spital	Sept.	80, 1	1877			229	246	475
Admitted in c	ou rs e	of th	e yea	r.		.	40	36	76
Whole number	r of p	atient	ts wit	hin t	he ye	ar.	269	282	551
Discharged, in	cludi	ng de	aths	•		.	54	68	122
Remainin	g Sepi	t. 30,	1878		•		215	214	429
Conditio	m of I	Patier	ıts dis	charg	ed.				
Recovered .	•				•	•.	7	19	26
Improved .			•				17	27	44
Unimproved	•		•	•			16	13	29
Died							14	9	23
Total .	•	•	•	•	•		54	68	122
Daily average	numb	er of	patie	ents			218.65	223.78	442.43
Smallest numb	1e),	_	-	429					
Largest number	eron	any d	ay (C)ct. 2	6) .		-	_	476

There were seventy-seven entries in the register of admissions in the course of the year; but one of them was that of a person already in the hospital as a private patient, who was recommitted, and received a new number, in order that the responsibility of her support might be transferred to the State. There were, consequently, but seventy-six admissions.

No person was admitted twice within the year: hence the number of persons coincides with the number of admissions.

The number of admissions was less than in any other official year since the hospital was opened. This result is the direct consequence of the opening of the new hospitals at Worcester and Danvers, which furnished accommodations for the excess of patients in the two older State hospitals in the eastern section of the Commonwealth, and thus prevented all transfers to this institution. This source of recruits to our halls being cut off, and the practice of not receiving patients from other States being still adhered to, as it has constantly been since 1871, it follows, that, for the first year in the history of the hospital, all of the patients admitted were not only residents of the State, but were committed directly from their homes or domiciles.

In consequence of the depreciated admissions, the whole number under treatment within the year was reduced to 551, which is smaller than in any foregoing year since 1866-67, and less by fifty-two than in the year 1876-77. On the 30th of October, 1877, twenty-five patients were transferred from this hospital to the Asylum for Chronic Insane at Worcester, reducing the number here, at that time, to 449. In the course of the intervening eleven months the ordinary movement of the population of the house has effected a still further reduction of twenty, leaving us, at the close of the year, with only 429. A slow reduction of this kind will undoubtedly be continued; for it is still evident, as it always has been throughout the twenty years of the existence of the institution, that the population of the four western counties of the State is not adequate to the supply of patients for so large a hospital.

Of the seventy-six persons admitted, twenty-one, or more than one-fourth of the whole, had formerly been inmates of the hospital. Nine of them were men, and twelve women. All of the men and nine of the women came for the second time; one woman, for the third time; one, for the sixth; and one, for the eleventh.

Of the eighteen who came for the second time, four men and three women, a total of seven, had been discharged recovered from their first admission. The woman who came for the third time had been discharged recovered twice; she who came the sixth time had been discharged recovered four times, and improved once; and she who came the eleventh time had been discharged recovered seven times, and improved three times.

STATUS OF PATIENTS.

The support of seventeen of the persons admitted was charged to the Commonwealth; that of forty-eight, to cities and towns; and that of eleven, to individuals. The only change of status since admission is that of one woman, who has been transferred from the State to a town in which it was found that she had a settlement.

Of the 122 patients discharged, including the twenty-three who died, fifty-five were beneficiaries of the State, and fifty-two of towns and cities; while fifteen were charged to private account.

Of the 429 patients remaining at the end of the official year, 199 are supported by the State, 178 by cities and towns, and fifty-two by private funds.

The weekly average number of each of the three classes, as deduced from the numbers in the house on the fifty-two Saturdays of the year, was, of State patients, 211.90; town patients, 175.71; private patients, 54.75; total, 442.86. The total weekly average differs only six-hundredths of a unit from the daily average.

RECOVERIES.

As stated in the table of general statistics, the number of patients who left the hospital in a mental condition which appeared to justify the record "recovered" was twenty-six. But among these was one woman, a subject of paroxysmal mania, who was so discharged twice within the year: hence the number of persons discharged recovered was but twenty-five. Seventeen of them had never before been treated at

this hospital; of five of them this was the second admission; of one, the third admission; of one, the sixth admission; and of one (the woman discharged twice), both the tenth and the eleventh admission.

Of the five persons who had previously been here once each, the recorded condition when discharged from their first admission was: unimproved, one; improved, two; recovered, two.

The person who was here for the third time had previously been discharged recovered once, and improved once; the one who was here on her sixth admission had been discharged recovered four times, and improved once; and the one who was here for the tenth and the eleventh time had, before her eleventh admission, been discharged recovered seven times, and improved three times.

The eight persons who had been former inmates of the hospital have now, since their last discharge, contributed twenty-two recoveries to its recorded statistics.

Of the twenty-five persons discharged as recovered, two were private patients, six were the wards of the State, and seventeen of cities and towns.

DEATHS.

We thankfully record another year of exemption from severe epidemic or endemic disease, with but slight prevalence of the disorders of the summer months. The mortality for the year was exceptionally small. The number of deaths was but twenty-three, which is but a little more than one-half the number in the next foregoing year, and, with but one exception, smaller than that of any official year since 1861-62, when the number of patients treated was not so large by more than one hundred. The proportion of deaths, relatively to the daily average number in the house, has never but once, since the hospital was opened, been so small. The exceptional year was 1872-73.

There was no instance of fatality in an acute disease of any organ other than the brain. The greatest mortality (eight) was from pulmonary consumption, and the next (three) from epilepsy. In the third rank (two each) were both apoplexy and paralysis. The other causes of death may be learned from the proper table in the appendix.

Ten of the persons removed by death were beneficiaries of the State, eleven were supported by towns or cities, and only two by private funds.

Suicides. — Not alone during the year just closed, but throughout a period of six years and eight months, have we been exempted from the trial consequent upon the death of a patient by his own hands. The last suicide occurred on the 27th of January, 1872. On the night of that day there were 415 patients remaining in the house. Since that time 1,050 have been admitted, making a total of 1,465. It may honestly be claimed that the treatment of so large a number of patients in the course of even so prolonged a period, without a single case of self-destruction, is somewhat remarkable. We present no theory of explanation. But whether the fact be a consequence of the vigilance of care-takers, or whether it be one of those exceptional things which are ranked in the category of remarkable coincidences, it is none the less agreeable.

It is now twenty years since the hospital was opened. The whole number of suicides in the course of that period is twelve. Ten of them occurred within the first ten years, and only two within the last ten years. But the daily average number of patients in the first period was only 336; while in the last it was 444. It consequently follows that the *proportion* of suicides in the first ten years was nearly seven times as great as it was in the last ten years.

In the appended table may be seen a compendious exposition of the mortality in the hospital during the whole period of its operation.

Deaths and their Ratios, from Sept. 30, 1858, to Oct. 1, 1878.

OFFICIAL	Whole No.	Daily Average	7			Per Cent on Whole No. of	Per Cent on
YEAR.	of Patients	No. of Patients.	Men.	Women.	Total.	Patients treated.	Daily Average No. of Patients
1858-59,	813	229.55	7	12	19	6.07	8.27
1859–60,	398	255.96	9	18	27	6.78	10.54
1860-61,	434	314.26	15	15	80	6.91	9.54
1861–62,	442	813.80	9	10	19	4.29	6.05
1862–63,	470	355.2 8	19	7	26	5.53	7.81
1863-64,	475	857.63	17	80	47	9.89	13.14
1864–65,	469	842.40	17	24	41	8.76	11.97
1865-66,	488	376.35	18	13	81	6.35	8.23
1866-67,	543	401.03	28	24	47	8.65	11.71
1867–68,	565	413.41	25	18	43	7.61	10. 4 0
1868-69,	590	405.10	13	12	25	4.23	6.17
1869–70,	604	408.83	22	11	33	5.46	8.07
1870–71,	616	4 21.90	16	12	28	4.54	6.64
1871–72,	619	428.72	19	18	37	5.97	8.63
1872–73,	614	437.23	13	8	21	3.42	4.80
1878-74,	626	469.54	14	11	25	8.99	5.82
1874–75,	629	475.35	23	18	41	6.52	8.62
1875–76,	629	474.21	18	19	87	5.88	7.80
1876–77,	608	476.16	21	21	42	6.96	8.82
1877–78,	551	442.43	14	9	28	4.17	5.19

The proportion of deaths for the full period of twenty years, as calculated upon the whole number of patients annually treated, is 6.01 per cent; as calculated upon the daily average number of patients in the hospital, it is 8.23 per cent.

The proportional mortality of the first ten years was twenty-five per cent greater than that of the last ten.

By either method of comparison the ratio of deaths for the year just closed is far below the average, not only of the whole period, but also of the latter half.

The proportionate mortality of men was about sixty per cent greater than that of women. This corresponds with past experience, although the discrepancy is larger than usual. There is no apparent cause for this difference, other

than the fact that the number of enfeebled frames and broken-down constitutions predominates with the men.

WORSHIP AND ENTERTAINMENT.

The assemblies of the patients for purposes of worship, instruction, entertainment, and amusement, in the course of the official year 1877-78, have been as follows:—

1. Exerci	SES ON THE	SABBA	тн, –	-							
	Divine worshi	p in t	he aft	erno	on	•		•	•	52 d	lays.
2. Exerci	ses on Secui	AR E	VENI	NGS,	_						
(a.)	Readings, open	ning a	nd clo	sing	with s	acred	mus	ic : —			
	The Bible	•		•		•				81 d	lays.
	The Bible, an	d sele	ctions	of	prose	•		•		9	"
	The Bible, an	d sele	ctions	of	poetry	7				32	"
	Miscellaneous	select	tions (of pi	rose					57	"
	Miscellaneous	select	tions (of p	etry			.•		50	"
	Miscellaneous	selec	tions	of p	rose a	nd p	oetry			70	"
(b.)	Lectures, open	ing an	id clos	ing i	with s	acred	mus	ic : —			
	Athens, with	illustr	ration	s						1	"
	Rules and reg	ulatio	ns of	the	hospi	tal				1	44
(c.)	Other entertain	ments	<i>:</i> —		_						
	Pictures show	n by	the st	ereoj	oticon					7	46
	Concert, of vo	cal m	usic (Chic	kerin	g Clu	ıb)			1	66
	Recitations		•			•	•			1	"
· (d.)	Social gatherin	ngs : —	-								
	Quadrille part	tie s		•						15	"
	No assembly	•	•	•	•	•	•	•	•	38	"
	Total							•		865 d	lays.

The sabbath services in the chapel were conducted, in rotation, by the pastors of several of the neighboring churches; and the stereoptic pictures were exhibited by Dr. T. W. Meekins.

FARM.

The hospital farm, which twelve years ago contained but about one hundred and ninety acres, has been increased, by various purchases, to about three hundred and thirty-two acres, and is now sufficiently large for the necessities of the institution. The site is admirably adapted to the purpose to which it is devoted, and a large proportion of the soil is available for tillage and pasturage. Somewhat more than

three hundred acres of the land is in one tract, nearly a mile in length from east to west, and varying from a quarter to half a mile in width, from north to south. It is bounded on the north, for a distance of a little more than a mile and one-fifth, by Mill River; and on the south, through its whole length (a distance, including curves, of 6,084 feet, or a fraction over a mile and forty-eight rods), by a public highway. Thus its situation is such, that, although in the immediate vicinity of a pretty large town, it can be subjected to that seclusion and isolation which are important in the treatment of the insane, with but comparatively little inconvenience to the surrounding inhabitants. Its position, and the irregularities of its surface, combine to invest it with the possibility of becoming one of the most beautiful of estates. has done her share of the work; and it now awaits the share of art, a portion of which it is, from year to year, receiving.

The products of the current season have equalled the average quantity. That of hay and of apples was abundant; that of potatoes, only medium; and that of winter squashes, an almost total failure, in consequence of the ravages of a worm heretofore unknown upon the premises.

The appended list of the productions was prepared by Mr. Wright: —

Hay (first gro	wth.	home	e farn	a). 9	1.% to	ns.	at \$1	5.		\$1,378	50
" (second a										648	75
" (first gro								•		219	00
" (second a				•	-					60	00
" (first gro							ne ·			324	00
" (second									•	31	50
		ш, С	iarke	Orci	ıaıu,	2 ₁	•		•	18	
" Fowle lo	t.	•	•	•	•	•	14	tons	•		
" Ferris lo	ե.				•		운		•	9	00
Corn fodder (green	1)	•				15	"		45	00
	dry)	. .					40	66		80	00
Oat straw							4	"		. 32	0 0
Wheat straw					٠.		ł	ton		4	00
Corn .							600	bushels		300	00
Oats .							250	66		87	50
Wheat .							15	44		15	00
Broom-seed			_				75	44		18	75
Potatoes .			_	-		2	,002	66		1,201	20
Carrots .	•	•	•	•	•	_	550	"		247	50
	•	•	•	•	•	•			•		
Beets .	•	•	•	•	•	٠	537	44	•	228	90
' Amount	carris	d for	anned						_	84.948	95

Amount brough	ht forward				84 ,948	95
Onions	. ,			. 250 bushels .	150	
Turnips			•	. 575 ''	143	75
Parsnips			•	. 85 ".	17	
Beans, Lima, in sh		·	·	. 1141 "	159	
" common, in		•	•	. 194 " .	21	
" string .		•	•	. 12 "	12	
" Lima, dry	• •	•	•	. 5 " .	15	
Pease, green, in sh	ell .	•	•	. 891 ".	94	
Sweet-corn, green,		•	•	1001 //	162	
Tomatoes .	III Cai	•	•	150 44	152	
Lettuce	• •	•	•	100 //	108	
~		•	•	. 108 " .	122	
	• •	•	•	31 " .	25	
Squashes, summer winter		•	•	2,740 lbs.	82 82	
WILLOGI	•	•	•	•	31	
Melons	• •	•	•	0,100	94	
Asparagus .	• •	•	•	. 33½ bushels .		-
Pie-plant .	• •	•	•	. 217	21	
Beet-greens .	• •	•	•	. 80} ".	71	
Cabbages .	• •	•	•	4,000 heads .	240	
Currants, red .	• •	•	•	. 24½ bushels .	82	
" black	• •	•	•	1 bushel .	_	50
Apples		•	•	1,100 barrels .	1,100	
Pears		•	•	. 64 bushels .	20	
Quinces		•	•	. 2 ".		00
Veal, raised here			•	. 873 lbs	121	04
Pork		•	•	14,451 " .	867	-
Pigs, sold .		•		. 117 " .	278	5 0
Turkeys			•	. 485 lbs	94	65
Chickens .				. 87 ".	17	16
" spring				. 7	8	50
Heads and plucks		•	•		87	00
Eggs			•	. 93 dozen .	18	80
Milk, grass-fed				17,232 quarts .	1,033	92
Cider		•		. 80 barrels .	120	00
Broom-brush .				. 575 lbs	40	50
Calf-skins .				. 9	13	50
Roasting-pigs				. 10	24	25
Wood				. 143 cords .	286	00
				_	10.010	

\$10,840 91

The quantity of hay produced this year by the original home farm was more than three times as great as it was fourteen years ago. The aggregate product of the farm as it now is was $179\frac{1}{2}$ tons. This is twenty-five tons more than in 1877. Of standing grass purchased of other landholders, the yield was fifty-two tons, making the whole quan-

tity housed a fraction over 231 tons. Judging from present appearances, not many years will elapse before the farm will produce all the hay required for home consumption.

As usual, we have entered in the foregoing list only onequarter of the milk actually produced, the whole quantity being 17,232 gallons. The quantity entered is the estimated product from grass in the summer months. The threefold larger quantity not entered is the estimated product, in the cold season, of hay and roots, the value of which is already credited in other parts of the list. No meats are credited other than that of animals raised upon the premises. eight hogs which were raised on the farm were fattened and slaughtered in the course of the year. They weighed, when dressed, respectively as follows: 452, 555, 378, 449, 330, 545, 495, 165, 598, 248, 627, 332, 226, 535, 500, 276, 468, 250, 519, 290, 400, 300, 420, 290, 420, 400, 505, 295, 397, 353, 400, 372, 335, 275, 508, 210, 200, 133. Total weight, 14,451 pounds. Mean or average weight of the heaviest ten, 538 pounds; and of the heaviest five, 572 pounds. As asserted in a former report, "We purchase no salt pork, no lard, and but a very small quantity of fresh pork, ham, or sausages. The sausagemeat, of which a liberal quantity is made, is eaten in fried rolls, when new. The hams and shoulders are cured here, and smoked off the premises."

The farm stock at the present time consists of eight horses, eight oxen, one bull, two three-year steers, thirty-three cows, one calf, thirty-six fat hogs, three boars, fifteen breeding sows, twenty-one shotes, thirty small pigs, and an average quantity of poultry.

How the Hospital is Supported.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time, it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the burial expenses of State patients who die in the hospital. The receipts from the last-mentioned source during the past year were one hundred dollars.

For the entire support of State patients, including clothing, and all loss from breakage and other kinds of destruction,

the hospital receives three dollars and fifty cents each per week from the treasury of the Commonwealth. This is the compensation fixed by statute law. Nearly one-half of the inmates belong to this class. During the past year the weekly average of them was 48.14 per cent of the whole.

For town patients it receives three dollars and fifty cents each per week from the town treasuries respectively for board, together with pay for clothing furnished by the hospital, and for damages suffered from them. Of town patients, the weekly average for the year was 39.75 per cent, or about two-fifths of the whole.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1878, was five dollars and seventeen cents and three mills each per week. Clothing and damages are extra charges. The weekly average of these patients during the past year was 10.12 per cent, or a trifle more than one-tenth of the whole.

The average weekly pay per capita which the hospital received for ALL its patients, State, town, and private, in the course of the year, is three dollars and seventy cents and eight mills. Such are the only pecuniary resources of the hospital. We turn to the results of

THE FINANCE OF THE LAST THIRTEEN YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of three hundred and two dollars and four cents in its favor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of five thousand dollars, in two appropriations, for specific purposes, — one of two thousand, and the other of three thousand dollars.

As an offset to the five thousand dollars bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and forty-two acres, the total cost of which was \$22,565. The State, then, has been overpaid for its bonus in the sum of \$17,565.

The amount paid by the hospital for repairs and improvements in the course of the thirteen years from Sept. 30, 1865, to Sept. 30, 1878, is \$156,701.31.

The surplus of cash assets now on hand is \$27,590.88, or \$27,288.84 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing now on hand, are estimated to have cost \$11,019.57. The amount of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$8,519.57.

The value of household furniture in the hospital is, at a low estimate, at least ten thousand dollars greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called eight thousand dollars. Collecting these several sums, the account of debit of the Commonwealth to the hospital appears to be as follows:—

Excess of cost of land over direct bonus			\$17,565 00
Repairs and improvements			156,701 31
Excess of present cash assets			27,288 84
Increase of provisions and supplies .			· 8,519 57
Increase of furniture	•		8,000 00
Total			\$218,074 72

The necessary current repairs of the buildings may be estimated at three thousand dollars annually. Deducting this sum for each of the thirteen years since Sept. 30, 1865, a total of \$39,000, there is a remainder of \$179,074.72. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

STUDIES RELATIVE TO THE CURABILITY OF INSANITY.

In our last three preceding reports, the question of curability has been subjected to a somewhat searching investigation, by which it was shown that the permanent recoveries from mental disorders are far less frequent than has generally been supposed, and that a very considerable proportion of the reported recoveries are not recoveries of so many different persons, but merely the recoveries of one person, or a few persons, a large number of times. Instances were given in which one person was reported recovered six times, and another seven times, in one year; and others in which, in the course of their lives respectively, one person had been reported recovered twenty-two times, and another forty-six times. The duplicate and multiplicate recoveries of these

few persons have led public opinion astray by having, as reported, the appearance of permanent recoveries of a large number of different persons.

It is a matter of surprise that some method has not been adopted at the hospitals of so reporting recoveries, that the reader may clearly understand how many of them are from first attacks, and how many from attacks subsequent to the first. I consider this remark as more applicable to the British hospitals than to those of the United States, both because, as a whole, they are the older, and because the science of statistics has been brought to a greater perfection in that country than in this. Nearly all of those foreign hospitals very carefully discriminate, in their tables of admissions, between first admissions and re-admissions. Wherefore are they not equally careful, in their tables of recoveries, to discriminate between first recoveries and re-recoveries? The utility of their statistics would be quite as much increased by the latter course as by the former. In England and Wales, from 1859 to 1874 inclusive, the stated recoveries in all hospitals and asylums for the insane were 34.01 per cent of the admissions. This result, as showing the curability of cases, or attacks, has its value; but, when the relation of insanity to all other subjects of human interest is taken into consideration, would it not have been more valuable to know what percentage of the persons recovered?

Are Recoveries in Proportion to Cost of Treatment?— The proposition involved in this interrogation would not be devoid of interest at any time; but at this juncture, after the experience of the last few years in greatly increasing the cost of hospitals, under a vague impression that recoveries from insanity will always be in direct ratio with the sum of pecuniary expense, it becomes a matter of absolute importance.

That degree of bodily comfort which is necessarily included in the best attainable hygienic conditions—pure air, cleanliness of person and surroundings, sufficient wholesome and nutritious food, a proper amount of exercise, and protection from the inclemencies of the weather—is doubtless essential to the attainment of the greatest probability of cure; but it is quite doubtful, that, beyond this attainment, the lavishing of money, however profusely, in mere luxuries, is of

any benefit. And yet there are many persons who appear to think that it is, and who measure their hope of recovery by the sum of money expended. To such an extent, indeed, is this notion sometimes carried in practice, that the very object of treatment is apparently thereby defeated, and recovery is prevented, instead of secured.

There are no statistics by which either the affirmative or the negative of our proposition can be positively demonstrated; but there are some which offer an interesting study when considered in relation to it, and, so far as they go, would seem to prove that increase of expenditure does not enlarge the proportion of cures. I allude particularly to the statistics of the McLean Asylum at Somerville, Mass., one of the oldest corporate institutions for the insane in the United States. In 1840 that asylum was under the medical care of Dr. Luther V. Bell. In the course of that year, one hundred and fifty-five patients were admitted, and the reported recoveries were seventy-five, which is equal to 48.38 per cent of the admissions. The average weekly cost of support of the patients was, for that year, three dollars and fourteen cents each: in other words, when paying three dollars and fourteen cents each per week, forty-eight patients in the hundred recovered.

Thenceforward, although with some fluctuation from year to year, there was, upon the whole, a gradual increase in the current expenses of the institution, until, in 1875, the average weekly cost for each patient was twenty-one dollars and seven cents. The increase of cost during the period of thirty-five years was 671 per cent, or a small fraction less than sevenfold. In the course of that period, the Appleton Wards, which for luxurious accommodation will not suffer by comparison with the best in Europe, were erected, as well as the two buildings for refractory patients, which, so far as I am informed, are unequalled by any others in the world.

With these additional elegancies of accommodation, and a nearly sevenfold augmentation of current expense, what was the condition of things in regard to recoveries? Were they increased, not, indeed, seven, nor six, nor five, nor even three fold (for that would have been impossible); but were they doubled? Alas, no! They had diminished sixty-one per cent of the ratio in 1840; so that, instead of forty-eight

(48.38) recoveries to the hundred admissions, there were only *nineteen* (18.82). The number of patients admitted in 1875, the closing year of the period, was eighty-five, and the number of recoveries sixteen, equal to 18.82 per cent.

The following table has been prepared in justification of the foregoing assertions. Beginning with the year 1840, it was intended to present the results of every fifth year subsequently, until 1875. The reports, however, of several of those years, were not readily accessible, and consequently the available years most nearly approaching those fifth years were taken. The years 1876 and 1877 were added to show that the diminished proportion of recoveries was not a temporary incident.

DATE.			Admit- ted.	Recov- ered.	Daily Average.	Whole Cost.	Weekly Cost per Capita.	Per Cent of Recoveries.
1840			155	75	128	\$ 20,919 63	\$ 3 14	48.38
1846	•		148	65	164	32,892 00	3 85	43.92
1848			143	82	171	33,130 09	3 70	57.34
1854			120	59	195	46,724 31	4 61	49.16
1855			123	56	192	60,867 26	6 09	45.53
1859			131	61	185	59,478 92	6 161 1	46.56
1861			111	54	193	63,311 87	6 30	48.65
1865			82	38	186	120,885 84	12 50	46.34
1870			79	33	187	134,339 63	13 81	41.77
1872			93	15	173	152,327 60	16 50 1	16.13
1875			85	16	151	165,660 47	21 07 1	18.82
1876			92	18	160	164,973 80	19 72 1	19.56
1877			110	15	175	143,148 94	15 66 ¹	13.63

"Look there upon that picture, and on this."

Recoveries in New Zealand. — "The Journal of Mental Science" for January, 1878, contains a review of the first report of Dr. F. W. Skae, who has recently been appointed inspector of the asylums for the insane in the Colony of New Zealand. From this we learn, that, within that infant colony, there are already no less than eight asylums, containing a total of 783 patients. The largest has 235, and the smallest, four. There is "one insane person in asylums to every 509 of the population;" but from defects of structure, or other objectionable features, those asylums furnish "satisfactory accommodation" for only 270 patients, although occu-

¹ These five sums are copied from the reports. As derived from the figures in the two next preceding columns of the table, they should be, beginning at the upper one, \$6.18, \$16.93, \$21.09, \$19.82, and \$15.78, according to our calculation.

pied, as above stated, by 783. All of these receptacles are "utterly deficient" in land, and their superintendents are not medical men. Of one of them, Dr. Skae says, "The condition of the patients, generally speaking, is deplorable. The great majority of them are simply prisoners, who are not, and in the present circumstances of the asylum cannot be, subjected to any system of treatment, curative or palliative. They have neither occupation nor amusement." Of another, — "parts of which (he thinks) were expressly constructed conformably to the 'wild beast theory of insanity,'" — he describes one room as "a cell, remote from supervision, badly lighted by a small barred window near the roof, having a sloping floor, with a drain to carry off urine, and furnished with a fixed privy, and a straw bag (for a bed), and having a slit in the wall through which food can be pushed."

These partial descriptions are here quoted for the purpose of emphasizing the results obtained in those asylums. "The ratio of recoveries to admissions," writes Dr. Skae, "is 13 per cent higher than in the Scotch and Irish asylums, and 23 per cent higher than in English county and borough asylums." "Their death-rate," remarks the reviewer, "was 6.70 per cent on the average number resident, and 4.49 per cent on the total number under treatment, being about 4.50 per cent lower than in England."

It is no cause for marvel that the reviewer, in reproducing these statistics of recovery and mortality, says, "Here are facts for our pessimists." Yea, verily! and it would be interesting to know what the optimists have to say about them. If within those rude colonial receptacles, over-crowded, and, in some portions, of a "quite disgusting description;" where, in the patients' rooms, they have sloping floors, "with a drain to carry off urine;" where the patients "have neither occupation nor amusement," and are not "subjected to any system of treatment, curative or palliative," - if, in these places, the proportion of recoveries is so much larger, and the proportion of deaths so much smaller, than in the asylums of Great Britain, in which are found all the appliances of the most recent science, and all the comforts suggested by an enlightened humanity, is it not (let it be asked in sorrow), - is it not high time, so far as results are concerned, for all of us to stop talking of the great improvements in the treatment of

insanity, and for the people of some parts of this country to ask for the quid pro quo for the money which has been poured like a deluge upon some of the recently-erected hospitals for the insane?

Disagreement of Doctors. — In the essay on the curability of insanity, mention was made of the fact that each person has his own standard of insanity, and that this standard depends, to a great extent, upon the constitution and the temperament of the individual; and a remarkable illustration of the difference of this standard in different persons, as exhibited in the reported cures of a hospital for the insane, was there presented. A still more impressive exhibition of it is seen in the foregoing statistics of the McLean Asylum, where, as will soon be perceived, this constitutional characteristic, will, in large measure, explain the diminution of reported recoveries, although it may not account for the non-increase of recoveries under the enormously enlarged disbursement of money.

Dr. Bell's proportion of recoveries in 1840 was forty-eight (48.38) in the hundred. There was no great reduction of this proportion during the lapse of a generation. Even as late as 1867 the reported recoveries were as high as fifty (50.56), and in 1869 almost forty-two (41.77), in the hundred. The asylum was then under the superintendence of Dr. Tyler. In March, 1871, Dr. Tyler resigned, and was soon succeeded by Dr. Jelly. The statistics of admissions and recoveries at the asylum during the last seven years of the administration of the former, and the first seven years of that of the latter, are shown in the subjoined table.

		FIRST	PERIOD.		SECOND PERIOD:				
YEAR.		Admis- sions.	Recover-	Per Cent of Recoveries.	YEAR.	Admis- sions.	Recov- eries.	Per Cent of Recoveries.	
1:64		101	42	41.48	1871 .	75	21	28.00	
1865	:	82	38	46.34	1872	93	15	16.13	
1866		103	46	44.66	1873 .	92	19	20.65	
1867		89	45	50.56	1874	75	20	26.66	
1868		92	34	36.95	1875 .	85	16	18.82	
1869		108	51	47.22	1876 .	92	18	19.56	
1870	•	79	33	41.77	1877 .	110	15	13.63	
		654	289	44.19—		622	124	19.94-	

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The number of patients admitted (654) in the course of first period was only thirty-two larger than that of the second period (622); but the number of recoveries (289) was more than twice as great. The percentage of recoveries in the first period was 44.19—, and, in the last, only 19.94—: in other words, the proportion of recoveries of the first period was to the proportion of recoveries of the last period as 221 to 100, or as 100 to 45.24. It is impossible, that, just at this juncture (1871), there was, in the character of the malady under which the persons received at the McLean Asylum were suffering, any sudden alteration sufficient to explain this remarkable discrepancy in results. There is indeed, so far as appears, no reason for a belief that there was any such alteration. No man of experience in the treatment of the disease, and acquainted with the superintendents of the two periods, would think of attributing the discrepancy in recoveries to a difference in the medical sagacity and skill of those superintendents.

Under the circumstances of the case, our only resource for an explanation of the surprising difference in the proportion of reported recoveries is the "personal equation," or the diversity of characteristics in the constitution and temperament of the reporters; and, if this explanation be the true one, it necessarily follows that we must believe, that if a certain number of persons who have been insane and subjected to treatment be placed before two men equally competent for judgment, for a decision in regard to their mental condition, one of those men may adjudge recovery to two hundred and twenty-one of them, while the other will adjudge it to only one hundred.

Reported Results no Criterion of the Merits of Institutions for the Insane.—One of the obvious consequences of what is contained in the preceding section is this; namely, that it is impossible to form an accurate opinion of the comparative merits of different institutions for the insane from the recoveries at them respectively, as set forth in the annual reports.

Although frequently done, it is absurd, at any time, to compare the recoveries at a private or corporate institution at which epileptics, paralytics, imbeciles, and some other classes are never received, with those at a State institution which is compelled to admit all classes, and attempt, from

this comparison, to judge of those institutions in respect to general excellence, or adaptation to the purpose to which they are devoted. The restricted and the unrestricted cannot justly be compared: they may more properly be contrasted.

But, even in regard to institutions precisely alike in respect to the reception of patients, it has been shown that men differ so widely in their estimate of what constitutes recovery, that it is the sheerest folly to base an opinion of comparative merit upon the alleged recoveries; for although, at the hospital A and the hospital B, the actual amount of improvement in the mental condition of the patients may be precisely equal, yet the superintendent of A may report twice as many recoveries as the superintendent of B.

Supporters. — Inasmuch as all that I have published upon this subject within the last three years was written under a strong conviction that I was eliminating an important truth, which would become the corrective of a prevalent, most glaring error, and inasmuch as all the elements of the argument have been drawn from the reports of asylums and hospitals, and the other works of authors who have written upon the subject, I have neither doubted the propriety and utility of the work, nor feared that the argument could be overthrown, or its conclusions disproved. The facts embodied in those conclusions are, however, so different from that which, in this country, had almost universally been accepted as truth for nearly half a century, that I must confess to an impression that I should stand comparatively alone, with but few who were prepared to agree with me, and fewer still to extend their support. It is a source of great satisfaction that this impression has been proven to be false. The report for last year contained extracts from approbative letters received from physicians and other persons interested in the subject. It is proposed here to add a few others as illustrations of the spirit in which the essays have been received.

A physician never connected with an institution for the insane, but who is thoroughly conversant with the literature of the disease, and who is himself a somewhat prolific author upon the subject, writes as follows:—

"It had not escaped my notice that the large number of reported cases of insanity in the annual reports of the insane

hospitals throughout the country were inconsistent with the apparently rapid increase in the number of the insane, - an increase out of all proportion to that of the population, and for which there seemed to be no good reason, if this large proportion of cures were permanent ones; but your demonstration, that the actual permanent cures do not exceed , twenty-five or twenty-six per cent, is none the less startling, because it explains the difficulty to which I have alluded. It is a sad comment on the progress of medical science in the art of healing, that we can as yet cure but one-fourth of the cases of insanity. I doubt if the proportion is much larger than it was at Gheel, in the days when the legend of the interposition of St. Dympna was fully believed, or when the monks of the Pyrenees relied upon the restoring effects of pure air and perfect quiet. I have no doubt of the truth of your deductions, and might plead, in extenuation, that insanity in America is more violent and unmanageable than in Europe (which I doubt not is true), but for the fact that your best statistics are from English and Scottish sources."

Another physician, probably not so deeply read upon the subject as the author of the foregoing extract, but who, in an article relating to insanity written within the last year, had asserted that seventy per cent of recent cases can be cured, makes the following and evidently sincere avowal:—

"Allow me to thank you for your monograph on the Curability of Insanity. I must acknowledge myself to have held an erroneous idea concerning the percentage of cures. Your exposition lays bare a glaring self-deception on the part of many, myself included. I am truly thankful to have been undeceived."

A gentleman of broad culture, not a physician, but much interested in the subject of insanity, and for some years a member of the board of trustees of a large State hospital for the insane, says,—

"Allow me to thank you for continued remembrance in sending your Twenty-second Report, received yesterday. I have read it this afternoon, and am greatly pleased with its truthful, fearless spirit. Your statistics and quotations are opening the eyes of those interested in the subject of insanity. If they are depressing to those who carry any portion of responsibility in care for the insane, it is the fault of the dire facts, and is not yours."

Thus far for voices from this side of the Atlantic. Let us turn to some of those from Great Britain. And here it may be remarked, that, were this report intended for physicians alone, the mere names of the authors of the remaining extracts would be their sufficient recommendation; but since its circulation will be largely among non-professional men, and members of other professions than that of medicine, some mention of their positions will not be out of place.

What says England, as represented by Dr. Daniel Hack Tuke, joint author, with Dr. Bucknill, of "The Manual of Psychological Medicine," the standard general treatise upon insanity for all English-speaking people?—

"I ought to have expressed my obligations before for the pamphlet on 'The Curability of Insanity,' which I have read with much interest. It is a valuable addition to our literature, and such a setting forth of the subject has been long required; but it is an unpleasant task to do any thing which even seems to render the curability of insanity less hopeful than it is."

And the new edition of the aforesaid manual contains the following paragraph:—

"The fallacy of taking the recoveries of cases, instead of persons, has been ably insisted upon and illustrated by Dr. Earle, in a pamphlet on 'The Curability of Insanity,' which is deserving of serious study by the superintendents of asylums in Britain as well as in the States."

The next extract is from Scotland. A few short weeks ago it might have been presented as a voice from the living; but it now, unhappily for humanity, comes as a voice from the dead. It is from Sir James Coxe, a man of great eminence in the medical profession, for many years a deeply interested and active member of the Scottish Board in Lunacy, and the author of several monographs upon insanity:—

"I have read it with much interest, and regard it as a most valuable contribution to the statistics of insanity. It cannot fail to exercise a powerful influence in neutralizing that spirit of inflation, which, I am sorry to think, is a too prevalent characteristic of writers on this branch of medicine. The merits of superintendents of asylums are already sufficiently great, without the adventitious glory of questionable success."

In conclusion comes another Scottish authority, of no less eminence than that which next precedes. It is that of Dr. W. A. F. Browne, long known as the eminently successful superintendent of the Crichton Royal Asylum at Dumfries, and subsequently as a member of the Board in Lunacy, and for a generation of years as one of the ablest of writers upon psychological subjects:—

"Although I differ from you upon one aspect of the subject of your paper, which may, to a considerable extent, be accepted as an exposition of the 'Incurability of Insanity,' I regard your argument as most lucid and logical, and as presenting the matter treated of in a new and most striking light.

"I entirely concur with you, that the ratio of curability has depended, and will continue to depend, upon the standard created by the mental constitution of each superintendent, unless, indeed, an extern expert be called in to adjudicate in each case.

"I have always demurred as to the accuracy of both Burrows and Woodward, even after giving credit for all the advantages and deductions which were claimed; but I was more than staggered by the practice which you reveal, and most properly denounce, of calculating the proportion of cures on the discharges; although I almost rejoiced over the explanation thus afforded of the ninety per cent, hundred per cent, &c., of cures, which seemed to attend your labors in America, and which excited the envy and despair of my confrères and of myself. I am not aware that this mode of estimating success has found imitators with us.

"The process by which you eliminate the numerical truth, by taking five years at different periods of what may be called an asylum curriculum, is, to my mind, demonstrative, and brings out nearly the figures to which we in England are now accustomed.

- " Your conclusions appear to me, upon the whole, impregnable.
- "Where I venture to differ from you is, that we must continue to calculate upon cases, and not persons.
- "Permit me, after this bold attempt to criticise, to express my unqualified approbation of your disquisition."

Those portions of the foregoing extracts which are here printed in Italics were not emphasized in the originals.

After the assertion that "we must continue to calculate (recoveries) upon cases, and not persons," Dr. Browne proceeds to give his reasons therefor. Those reasons are cogent and convincing; but the doctor mistakes my position. Nowhere in my essay is it asserted that the calculation of recoveries should not be made upon cases. I have always pursued that method, and I do not perceive in what way it can be avoided. All that I have insisted on is, that the reports of recoveries shall be accompanied by an explanation by which the reader can learn whether those recoveries are from first attacks, or from attacks varying from the second to the thirtieth, the fortieth, or the fiftieth; whether, if you report ten recoveries, it is to be understood that ten different persons have really recovered, or merely that one person has recovered from ten successive attacks. The inability to convey this information is the grand fault in the general method of reporting, and by this fault public opinion has been grossly misled.

This subject very naturally leads to what follows.

A Step forward.—The following preamble and resolutions are here introduced as evidence that a no inconsiderable part of the physicians engaged in the specialty not only perceive the imperfection of the general method of reporting recoveries, but are prepared to so alter that method as to avoid such errors in the future. They were adopted in December last by the New-England Psychological Society, an association of the superintendents of the regularly organized institutions for the insane in the States east of the Hudson River:—

"Whereas The method generally heretofore pursued in reporting the recoveries of patients at the institutions for the insane has, by its avoidance of a definite statement of the repeated recoveries of the same person in cases of periodical or recurrent insanity, been largely instrumental in imparting to the general reader, and particularly to persons outside of the profession who are specially interested in the subject, an erroneous opinion of the curability of persons afflicted with mental disorder; and

"Whereas, As a result of that erroneous opinion, computations have been made in political and social economy, based

upon an assumed proportion of curables among the insane, which is evidently far too large; and

- "Whereas The attainment of truth, and not the dissemination of error, is the true object of all statistical science: therefore
- "Resolved, That, in the preparation of published reports, this society recommends the adoption of some method by which that erroneous opinion may be corrected, and in the future prevented.
- "Resolved, That, without prescribing or suggesting a definite formula, it is recommended that a clear exposition should be made of the facts in relation to the following points:—
- "1st, In regard to patients admitted in the course of the year: the number admitted for the first time, and the number of re-admissions, specifying the number who have been received twice, thrice, four, and any greater number of times, and also the number who had previously been discharged recovered, specifying, likewise, the number who had recovered once, twice, thrice, and any greater number of times.
- "2d, In regard to patients discharged in the course of the year: the whole number of recoveries, specifying the number of those who recovered for the first time, as well as of those who recovered for the second, the third, the fourth, the fifth, and any time still higher in the scale of numbers.
- "Resolved, Furthermore, that the true import and value of the statistics of any institution for the insane can be attained in no way other than by an analysis of the results, in which are shown, not alone the number of persons who recovered once, but the number of those same persons who recovered twice, thrice, four, five, or any higher number of times; and that any collection of statistics which has not been subjected to such an analysis is of comparatively little value."

The Vermont Report.—As this article is in course of preparation I receive a copy of the report of the Vermont Asylum for the two years ending July 31, 1878. As I open it to the section on Recoveries, I find, that, with "the courage of his convictions," Dr. Draper gives the explanation called for in the foregoing resolutions.

For the first time in the forty years of the existence of that institution is the reader of its reports enabled to obtain that understanding of the results of treatment, without which no accurate opinion of the importance of those results — as viewed in relation to the disease, or to either medical, political, or social science — can by any possibility be formed.

"Of the number discharged," says the report, "fifty-two—thirty-six men and sixteen women—recovered. This is a fraction over thirty-one per cent of the number admitted. Of these, twenty-eight recovered from a first attack, nine from a second, three from a third, four from a fourth, two from a fifth, two from a sixth, one from a seventh, one from a tenth, one from a fourteenth, and one from a fifteenth."

What a flood of light the third sentence of this paragraph throws upon the first! and not upon that alone, but upon the medical history of the hospital from the time of its origin. Of the fifty-two recoveries only twenty-eight, or two more than one-half, were from the first attack. The remaining twenty-four were of patients who had previously left the hospital "recovered" from one to fifteen times each. Those twenty-four persons, as will be perceived by a brief computation, have given one hundred and eleven recoveries to the statistics of insanity, and it is not at all improbable that they will yet give as many more. It is very certain that their future contributions will be large.

Thus we have another evidence of the truth, that wherever and whenever light is permitted to break in upon the darkness of the statistics, in gross, of the institutions for the insane, the revelation comes forth, that a large proportion of the recoveries—and, the older the institution, the larger is the proportion—are merely the expressions of intermissions in the disease of a comparatively few persons who pass their lives in oscillating between their homes and the hospitals. And once more are we impressed with the folly of any attempt to illustrate any important subject by the crude, unanalyzed statistics of the hospitals, or to deduce from them any conclusion or opinion relative to any of the great social problems of the day.

Dr. Luther V. Bell's Prediction.—It will be recollected, that, whatsoever might have been the incentives to the production of the essay upon the curability of insanity, one of the objects gained by it was the justification of an asylum

in a neighboring State against an attack from a prominent officer of the government of that State, one of whose condemnatory allegations was, that the proportion of recoveries in these latter years has been less than in the earlier history of that asylum. And, in view of said allegation, it was written in that essay, "The declarations of the earlier superintendents are returning, like boomerangs, to spend their ultimate force upon their promulgators, or . . . upon the persons now standing in the places of their promulgators."

This was written without any knowledge, or, at least, any recollection (for I must have read it thirty-seven years ago) of a paragraph in one of Dr. Bell's reports, published at the time in which there was a general rivalry among the superintendents for the production of the highest proportion of recoveries, and but two years prior to the announcement at the hospital at Columbus, O., that the per cent of recoveries on all recent cases discharged at that institution in the course of the preceding year was one hundred.

"As things now are progressing," wrote Dr. Bell, "there is infinite danger that the public mind may arrive at such views and expectations as to the curability of insanity as will eventually re-act most unfavorably on our successors in these holy though arduous avocations, if not upon ourselves."

The danger foreseen by that sagacious observer was not averted, and the very form of public opinion which he feared was eventually produced. It is due to the memory of the very able and amiable prophet that his prophecy should be remembered.

Acknowledgments are due, on behalf of the inmates of the hospital, to the Chickering Club, for a concert of vocal music; to S. M. Smith, Esq., for sixteen volumes of books for the library; to Mrs. J. H. Butler, for a large number of magazines and other pamphlets; to the Book Club, through Miss Julia Clark, for several volumes of reviews and other literary periodicals; to Dr. Henry B. Stoddard, for a file for one year of "The Independent;" and to the publishers of "The Christian Register," for one copy weekly, and the publisher of "The Staaten Zeitung," for two copies weekly, of those papers.

The year closes with the same corps of officers, both principal and subordinate, with which it began; and to them,

who during its rapid flight have given me their cordial and efficient aid, upon the one side, and to your honorable Board, whose counsel and support have sustained me, upon the other, it only remains for me to extend my warmest acknowledgments.

Respectfully submitted,

PLINY EARLE, Superintendent.

NORTHAMPTON, Oct. 12, 1878.

APPENDIX.

TABLE No. 1.
Admissions, 1877-78.

	1	ONTH	18.				Males.	Females.	Total
October, 1877 November	:	:	•		•		5 2	2 4	7 6
December . January, 1878		•	•				2 5 3	2 2	7 5
February . March .	•			•			3 1	4	7 5
April May		•	:	•	•		$ar{f 2}$	4 3	6 5
June July	•	•	•	•	•		4 3	5 2	9
August . September .	•	:	•	:	:		6	8	9 5
Totals .	•	•	•			•	40	36	76

¹ As no person was admitted more than once in the course of the official year, the totals in this table indicate the true number of *persons* received.

TABLE No. 2. Discharges, 1877-78.

		DIRECT	·.	11	VED BY	_		TOTALS.	
Montes.	Maloe.	Females.	Total.	Malos	Pemalos.	Total	Males.	Females.	Total.
October, 1877 November December January, 1878 February March April May June July August September	5 3 1 8 1 5 7 4 2	3 5 2 2 - 3 9 6 3 6 8	8 10 5 8 4 14 13 10 7 8 5	5 1	20	25 1 - 4 - - - - 1	6	5	33 11 5 7 3 4 14 18 10 7 8 7
Totals.	45	45	90	8	28	81	54	68	122

TABLE No. 3.

Daily Average Number of Patients in the Hospital, 1877-78.

MON	THS.			Males.	Females.	Total.
October, 1877.		•		228.03	244.48	472.51
November .				223.07	224.30	447.87
December .			. 1	221.22	224.42	445.64
January, 1878			.	221.68	221.77	443.45
February .			!	221.82	222.96	444.78
March				222.00	227.22	449.22
April		-		219.40	223.93	443.33
May				217.29	220.52	487.81
June				210.53	220.17	430.70
July	•	-		211.35	220.61	431.96
August		-		212.87	218.74	431.61
September .	•	•		214.63	215.77	430.40
Average for	the v	ear	. -	218.65	223.78	442.43

¹ These totals were obtained by a division of the sums of daily residence, for the year, by 365, the number of days in the year.

TABLE No. 4.

Relation to Hospitals of the Persons admitted, 1877-78.

	Males.	Females.	Total
Never before in any hospital	29	24	58
Former inmates of this hospital of other hospitals in this	8	9	17
State	-	-	-
of hospitals in other States, of this hospital, and of other	2	-	2
hospitals in this State . of this hospital, and of hos-	1	1	2
pitals in other States . of other hospitals in this State, and of hospitals in	-	2	2
other States of this hospital, of other hospitals in this State,	-	-	-
and of hospitals in other		1 .	
States	-	-	-
Total of persons	40	36	76

TABLE No. 5.
Residence of the Patients admitted, 1877-78.

	CO	UNTI	ES.			Males.	Females.	Total.
Hampshire	•					6	10	16
Hampden				•		16	19	35
Franklin						9	4	18
Berkshire					• [8	2	10
Worcester						_	1	1
Bristol		•				1	-	1
Totals						40	86	76

TABLE No. 6.

Nativity of the Patients admitted, 1877-78.

	N.	ATIVI:	ſΥ.				Malos,	Females.	Total.
Maine		•	•				1	_	1
Vermont .	•			•		•	2	1	8
Massachusetts	.•	•	•		•	•	20	10	30
Connecticut	•	•		•			2	4	6
Rhode Island	•						-	1	1
New York .		•					2	4	6
Virginia .	•	•	•	•	•		1	-	1
Total of	Americ	ans		•	•		28	20	48
Nova Scotia	•						1	2	3
England .			•			•	1	1	2
Scotland .	•		•	•	•		-	1	1
Ireland .	••						8	10	18
Germany .	•	•					-	1	1
Austria .	•			•	•		_	1	1
Sweden .			•		•		1	-	1
Prussia .		•	•		•	.	1		1
Total of fo	oreign	ers	•	•			12	16	28
of A	meric	ans	•	•	•	.	28	20	48
of p	erson	8.					40	36	76

TABLE No. 7.

By what Authorities committed, 1877-78.

AUTHORITIE	8.				Malos.	Females.	Total.
Probate Court		•	•		30	30	60
Overseers of Poor .					5	1	6
Friends		•			4	4	8
Supreme Judicial Court		•	•		-	1	1
Returned from Elopement	٠.	•			1	-	1
Total of persons .	•	•	•	•	40	86	76

TABLE No. 8.

Ages of the Patients admitted, 1877-78.

AGES	l.				Males.	Females.	Total.
Fifteen years and under		•		•	-	_	_
From 15 to 20 years .			•		8	8	6
20 to 25 years .				•	6	2	8
25 to 30 years .	•	•	•		7	8	10
30 to 35 years .	•			•	8	6	9
85 to 40 years .		•	•	•	7	8	15
40 to 50 years .		•	•		5	8	18
50 to 60 years .	•		•	•	4	. 6	10
60 to 70 years .		•	•	•	8	_	8
70 to 80 years .	•	•	•	•	2	-	2
Total of persons .	•	•	•	•	40	36	76

TABLE No. 9.

Relation to Marriage of the Patients admitted, 1877-78.

		CO	DITIC	on.				Males.	Females.	Total.
Married				•	•		:	15	14	29
Single	•		•	:	•			21	15	86
Widowers					•			3	-	8
Widows					•			_	4	4
Divorced		•	•			•		1	8	4
Total	of p	erson	8.					40	86	76

TABLE No. 10.

Occupations of the Men admitted, 1877-78.

Laborers .			11	Tailor .		•	•		1
Farmers .			10	Currier .	•				1
Mill-operatives			2	Mechanic	•	•		•	1
Paper-maker		•	1	Carpenter		•	•		1
Cabinet-maker			1	Organist		•		•	1
Teamster .			1	Weaver.					1
Scrap-iron dealer			1	Sailor .	•	•			1
Salesman .			.1	None .				•	4
Clerk			1	Total					40

TABLE No. 11.

Alleged Causes of Insanity of the Patients admitted, 1877-78.

CA	USES	3.				Males.	Females.	Total
M	entai	! .						
Business troubles	•	•	•	•	•	1	2	8
Trouble		•	•	•	•	1	1	2
Religious excitement				•		1	-	1
Domestic trouble						-	2	2
Total of mental		•		•		3	5	8
Ph	ysica	ı.						
Overwork	•	•	•	•	•	2	9	11
Ill health	•	•	•	•	•	8	3	6
Masturbation .	•	٠	•	•	•	6	-	6
Epilepsy	•	4	•	•	•	8	2	5
Intemperance .	•	٠.	•			4	1	5
Injury of head .			•	•		2	2	4
Change of life .	•	•	•		•	-	3	3
Puerperal			•			-	2	2
Opium-eating .		•	•	•		-	1	1
Typhoid-fever .			•			1	-	1
Brain-fever				•		1	-	1
Organic disease of br	ain	•				1	-	1
Lightning stroke.		•				1	-	1
Injury			•			1	-	1
Old age						1	_	1
Total of physical				•		26	23	49
Total of mental						3	5	8
Unknown .				•		11	8	19
Total of persons		•				40	36	76

TABLE No. 12.

Duration of Disease before Admission, 1877-78.

DURA	ATIO	N.				Males.	Females.	Total.
Under 1 month .	•	•	•			4	5	9
From 1 to 3 months						5	6	11
3 to 6 months		•	•			8	4	12
6 to 12 months		•	•	•		3	4	7
1 to 2 years	•			•		3	3	6
2 to 5 years		•	•		•	6	5	11
5 to 10 years		•		•	•	1	8	4
10 to 20 years			•	•		3	3	6
Over 20 years .					•	1	_	1
Unknown			•		•	6	3	9
Total of persons			•			40	36	76

TABLE No. 13.

Age at First Attack of Insanity, 1877-78.

A	BES.					Males.	Females.	Total.
Fifteen years and und	ler			•		1	1	2
From 15 to 20 years					٠.	4	3	7
20 to 25 years					.	4	5	, 9
25 to 30 years		•				7	6	13
30 to 85 years					.	4	5	Я
85 to 40 years		•				ą	5	8
40 to 50 years						4	5	9
50 to 60 years					.	3	4	7
60 to 70 years		•			.	3	-	3
70 to 80 years					. !	1	i -	1
Unknown		•	•		•	6	2	8
Total of persons						40	36	76

TABLE No. 14.

Status of the Patients admitted, 1877-78.

HOW SUPPORTED.				Males.	Females.	Total
As first admitted. Supported by State by towns and cities by individuals .	:	:	:	9 27 4	8 21 7	17 48 11
Total of persons		•		40	36	76
Of the same patients as at prese discharged.	ent, c	r whe	n			
Supported by State by towns and cities by individuals .	:	•		9 27 4	7 22 7	16 49 11
Total of persons		•		40	36	76

TABLE No. 15. Deaths, 1877-78.

CAU	8 E 8	OF 1	DEATH	L.			Males.	Females.	Total.
	ervo	us Sz	stem.						
Epilepsy .	•	•	•	•	•	•	2 1 1	1	3
Apoplexy			•	•		.	1	1	2 2
Paralysis .	•	•	•	•	•	.	1	1	2
Meningitis .		•	•	•	•	•	_	1	1
Inflammation of	bra	in		•	•		_	1	1
Cerebral congest	ion			•			1	-	1
Exhaustion of ac	eute	man	ia.	•			1	-	1
Exhaustion.	•	•	•	•	•		1	-	1
	Res	pirate	orw.						
Phthisis .	•	•	•	•	•	•	6	2	8
	Di	gesti	ve.				:		
Disease of liver	•	•	•	•	•	•	-	1	1
	G	enero	ıl.						
Marasmus .							1	-	1
Old age	•	•	•	•		•	-	1	1
Total .							14	9	28

TABLE No. 16.

Number and Status of Patients at the Close of each Week in the Year, 1877-78.

DA	TE.	State.	Town.	Private.	Total.	DAT	re.	State.	Town.	Private.	Tota
18	77.					187	8.				
Oct.	6,	238	176	59	473	Apri	l 6,	212	179	55	446
	13,	238	177	59	474		13,	211	175	56	442
	20,	239	177	59	475		20,	212	175	56	448
	27,	239	177	58	474		27,	212	173	55	440
Nov.	3,	213	178	· 58	449	Мау	4,	211	174	56	441
	10,	213	178	58	449		11,	211	174	55	· 44 (
	17,	214	176	58	448	ll	18,	21,1	173	54	488
	24,	215	173	58	446		25,	212	170	53	43
Dec.	1,	214	172	58	444	June	1,	211	168	53	432
	8,	215	173	57	445		8,	208	167	54	429
	15,	214	174	57	445		15,	208	168	54	480
	22,	214	175	58	447		22,	208	169	54	48
	29,	215	174	5 8	447		29,	209	170	53	482
18	78.					July	6,	208	173	53	434
Jan.	5,	212	174	57	443	}	13,	208	173	53	434
	12,	213	175	56	444		20,	207	172	58	432
	19,	210	176	56	442		27,	206	171	53	430
	26,	210	176	57	443	Aug.	3,	206	173	53	432
Feb.	2,	210	177	57	444		10,	205	178	51	484
	9,	210	176	57	443		17,	203	177	51	431
	16,	210	176	58	444		24,	203	177	51	481
	23,	212	178	58	448		31,	202	178	51	431
Marcl	a 2,	212	177	58	447	Sept.	7,	201	179	51	481
	9,	218	179	58	450		14,	201	179	51	431
	16,	213	178	58	449		21,	200	179	51	480
	23,	213	178	58	449		28,	199	180	52	43
	30,	213	179	57	449						

WEEKLY AVERAGE.

State patients	•	•	•	•				211.86
Town patients				•				175.06
Private patients		•	•	•	•	•	•	55.42
Total .	_	_		_				442.84

TABLE No. 17.

Classed Average of Patients.

OFFIC	IAL	YEAR	i.	State Patients.	Town Patients.	Private Patients.	Total.
Month	ly A	verag	e.				
1864-65				225.10	48.16	69.83	343.25
1865–66	•	•	•	252.16	50.58	75.58	378.33
Week	ly A	verag	e.				
1866-67				261.96	49.46	89.75	401.17
1867-68	•			262.65	47 92	103.06	413.63
1868-69	•			248.52	54.98	101.46	404.96
1869-70				236.19	65.04	107.23	408.46
1870-71				234.10	77.07	118.38	429.5
1871-72				226.96	89.57	112.27	428.80
1872-73				248.02	99.23	90	437.25
1873-74				284.48	102.88	82.06	469.42
1874-75				274.35	128.34	72.46	475.18
1875-76				259.19	146.02	68.94	474.18
1876-77				254.84	161.58	60.02	476.44
1877-78				211.90	175.71	54.75	442.36

TABLE No. 18.

Monthly Consumption of Gas.

			MON	THS.				Cubic Feet.	Daily Average
			18	77.					
October								34,400	1,109.67
November		•						39,450	1,315.00
December	•	•	•	•	•	•	•	45,000	1,451.61
			18	78.					
January								42,350	1,366.13
February								32,600	1,164.28
March								27,750	895.16
April.								19,600	653.33
May .								14,500	467.74
June .								12,500	416.66
July .								11,750	379.03
August								15,550	501.61
September	•	•	•	•	•			21,750	725.00
Totals								317,200	870.43

¹ Daily average for the year.

TABLE No. 19.

Annual Cost of Gas.

	Y	EAR.				Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860–61 .						\$2,030 39	314.26	\$ 6 46
1861–62 .		•		•		2,085 29	313.80	6 64
1862–63 .	•		•			2,109 02	355.63	5 93
18 63–64 .					•	2,069 79	357.63	5 78
1864–65.	•					1,653 05	842.40	4 82
1865-66 .	•	•				1,107 98	376.85	2 94
1866–67 .	•			•		1,056 16	401.03	2 63
1867-68.			•		•	1,022 51	413.41	2 47
1868-69.				•		908 92	405.10	2 23
18 69–7 0.						915 30	408.83	2 23
1870–71 .	•					1,048 99	421.90	2 47
1871–72 .						980 94	428.72	2 28
1872–73 .						1,006 61	437.23	2 30
1873-74.	•	•				1,066 74	469.54	2 27
1874–75.		•			•	1,012 63	475.85	2 18
1875–76 .						1,089 82	474.21	2 29
1876–77 .			•	•		1,033 59	476.16	2 17
1877–78 .				•		1,066 02	442.43	2 41

The hospital has always been supplied with gas by the Northampton Gas-Light Company, at the uniform price, under special contract, of three dollars and twenty-five cents (\$3.25) per thousand cubic feet, with an additional charge for meter-rent.

Table No. 20.
Supplies for the Several Departments for the Year 1877-78.

Forks.		1	_1		_ !	ı	ı		1	ı		1		1	
Kulace		1	4	-	- 1	_	4	_	1	1		1	7		
Strup-cups.		!	_	ı	1	_1	1	1	ı	١		1	63	1	
Pitchers.		20	ı	1	_	_	1	1	_	1		1	63	61	_
Bowle.		1	Ø	١	က		က	١	1	01		1	4	1	9
Muga		1	63	9	1	12	12	9	ı	ı		9	ı	1	1
Tumblers.		37	18	I ———	1	က	1	1	63	1		9	24	12	'
Saucers.		24	9	12	12	9	18	1	ı	ı		1	12	1	18
Cape.		6	12	9	9	t	1	1	ı	ı		1	12	12	18
Plates.		18	9	12	12	18	15	ı	ı	ı		8	8	18	54
Carpet-strips.		2	1	တ	ı	1	1	1	ı	1		1	13	ı	20
Сошрв.		-	တ	က	က	_	တ	_	4	က		ī	ı	9	1
Hair-brushes.		1	-	-	_	1	Ø	-	ı	63		ı	ı	1	1
.влоттіМ		ı	-	_	1	ı	1	C)	1	œ		ı	-	ı	_
Сратрета.		9	12	4	8	38	24	80	8	6		9	12	12	9
EMGL8		1	1	1	1		1	1	ı	-		1	-	ı	1
Wash-bowls.		01	-	1	1	-	ı	ı	1	ı		ı	1	1	
Curtains.		2	1	ı	1	1	1	ı	1	ı		9	-	_	1
Towels.		۰.	12	1	4	8	ı	က	1	1		12	34	8	18
Pillow-ticks.		ı	ı	1	ı	ı	1	ı	ı	1		1	1	80	1
Bed-ticks.		-	9.	4	-	1	ı	ဆ	13	အ		81	-	ı	-
Rubber-sheets.		t	1	1	-	1	ı	-	4	1		1	1	_	1
Blankets.		61	1	ı	ı	_1	1		ı	ı		1	1	6	
Bed-spreads.		တ	9	က	1	4	1	1	ı	-		8	ı	8	1
Білом-сваев.		z,	26	24	20	18	24	18	18	18		15	21	24	12
Sheets.		14	56	26	56	24	48	12	12	12		1	တ	12	1
		•	•	•	•	•	•	•	•	•		•	•	•	•
	nţ.			alla			ılla			8 118	ent.				
	rtme			'nΗ			h Ha			h H	artm				
	epa	펼.	Ξ.	1 4tl	⊒	п.	1 4tl	ם.	Ξ.	1 4tl	Dep	∄.	п.	Ξ.	all.
	Men's Department.	t Hs	2d Hall	8d and 4th Halls	t H£	2d Hall	3d and 4th Halls	t Hs	2d Hall	3d and 4th Halls	Women's Department.	t Ha	2d Hall	3d Hall	4th Hal
	Men	18	5 q	3 d	e 18	2d	3 d	18	2	33	ome	18	2 d	ಜ್ಞ	4t]
	7	Upper 1st Hall			Middle 1st Hall .			Lower 1st Hall .			Ż	Upper 1st Hall			

Middle 1st Hall		•	_	- 15	- 6	10	-	∞	4	18	61	61	တ	12	63	1	9	4	12	6 1	12 8	38	<u>.</u>	-	<u>-</u>		<u>.</u>	
2d Hall	•	•	_	8 24	1	C1		60		8	C3	1	1	24	_		63	1	6 1	12 1	18	-	•	4	4	÷	$\frac{\cdot}{\cdot}$	1
3d Hall	•	•	12	2 16	3 6	_		ı	9	83	ı	ı	1	18	1	1	6	-	9	9	8	<u>귀</u> 「	<u></u>	<u>.</u>	<u>'</u>	<u>:</u>	<u>'</u>	1
4th Hall	•	•	16				<u>'</u>		1	4	ı	1	1	8	1	1		1	9	1	1	<u> </u>	<u>.</u>	1	<u> </u>	·	÷	
Lower 1st Hall	•	•	4	14		2		တ	1	83	67	ı	ı	9	1		9	တ	1	-			.	1	<u> </u>		<u>.</u>	,
2d Hall	•	•	12	2 15	- 00	15	-	1	63	40	ı	-	_	12	1	 -	13	1	1		1	1	· 1	1			÷	1
3d Hall	•	•	1	- 14		13	1	8	63	16	1	ı	ı	18	_		14	1	1	9	9	188		1	<u> </u>	<u>.</u>	÷	ı
4th Hall	•	•	1		<u>'</u>		-	_	ı	1	-	1	ı	က	-		C1	-	1	1	1	$\dot{-}$	<u>.</u>	· 1	<u> </u>		<u> </u>	ı
Kitchen .	•	•	_	<u> </u>	1			ı	ı	∞	_	ı	ı	1	1			<u>~</u>	264 3	36 2	24 5	- 2	- 12		4	~		18
Rear	•	•	83	26	<u> </u>	_	_	15	. 1	44	6	63	ı	ı	8		_	20	1	1	1			1	_ <u>'</u>	1	<u>.</u>	1
Centre .	•	•	I 	<u>-</u>					1	∞	ı	ı	ı	ı	1		_	1	48		1	<u> </u>	· 1	1	-		<u>.</u>	ı
Aggregate	•	•	287	378	20	8_	00	8	22_	် ရွှ	37	G	œ	254	14	80	88	36 477	77	1 174	4 199	8 8	8 2	8	!	8	 	182
	1		1			١		1		i	 - -					i												11

Papers Pina. Papers Needles. ı 1 ı ı Thread. Skeins Linen 2 CN C O C) CV Spools Thre ı Shoe-brushes œ 13 Blacking. 1 Spittoons. 1 O C1 Palls. Mops. Dust-pans. Scrub'g-brushes. C Dust-brushes. Whisks. 2 얾 Brooms 12 20 28 44 38 3 28 8 53 83 2 ಜ 22 gowb' bonngs ŧ Wash-basins. ı ı ı 9 8 Rollers. 2 80 Dish-towels. ı 8 9 2 8 lron Spoons. 2 Tin Cupe. O ı Tin Plates. 1 1 ١ ı 1 ı Харкіпв. စ 1 ı ı 1 Table-spreads. ı Casters. ı O ı 1 snooq8 S ı ı ı Women's Department. 3d and 4th Halls 3d and 4th Halls 3d and 4th Halls Men's Department. 2d Hall . 2d Hall . Middle 1st Hall. 2d Hall . Lower 1st Hall. Upper 1st Hall. Upper 1st Hall.

TABLE No. 20. — Continued.

Middle 1st Hall .	•	-	1	63	ī	-	-	-	1	9	1	-	44	12	-	_	1	-	- R	- -	_	<u> </u>	4	<u> </u>	1	4
2d Hall .		•	1	ı	1	1		9	54	1	ı	_	22	28	_	1	_	1		2	1		17	ı	~	G
8d Hall .		•	1	1	ı	1	1	1	13	1	_	_	<u></u>	8	1	1	_	_	4	2	1		18	63	00	G
4th Hall.	•	•	1	ı	1	1		1	1	9	1	-	55	9		1	1	1		<u> </u>	1		18	ı	ထ	œ
Lower 1st Hall.	•	•	ı	63	1	1		-	-	9	÷		46	13		_		<u>.</u>	1	<u>'</u>	1		10	ı	တ	00
2d Hall .		•	ī	ı	1	1	-	12	54	-	i	1	42	20	1	63	61	_	_	_	-	<u> </u>	22	ı	63	6
3d Hall .	•	•	ı	1	1	1				1	÷	1	88	6			81	<u>.</u>	-	-	<u> </u>	1	17	1	-	7
4th Hall.	•	•	1	87	တ	_ <u></u>	1	က	1	1	·		12	က		_	÷	<u>.</u>	1	<u>'</u>	-	1	15	ı	-	4
Kitchen		•	9	ı	-	() ()	24	18			'	1	72	29			1		- 9	 	'		1	ı	ı	ı
Rear		•	ı	1	67	1	1	-	1	1	÷	-	164	72	<u>ھ</u>	တ		<u>.</u>	-	1 —	l 		1	ı	1	1
Centre	•	•	-1	ı	-	1	_	1		1	<u> </u>	1	81	G	~	_	-	· 1	- 	<u>.</u>	1		1	ı	ī	1
Aggregate .	-	•	17	=	9	6	27 6	62 15	122	201	35	4 1090	0 428		15 1	18	25	9 24	32	18	91	! !	171	45	88	72
			1	1			-						l		1		I						-		١	١

TABLE No. 21.

Trustees of the Northampton Lunatic Hospital.

NAME.	Residence.	When app'ted	Service ended.	From what Cause.
Charles E. Forbes .	Northampton .	1856	1857	Term expired.
Lucien C. Boynton .	Uxbridge	1856	1858	do. do.
Eliphalet Trask .	Springfield	1856	1875	do. do.
John C. Russell .	Great Barrington .	1856	1859	Resigned.
Horace Lyman	Greenfield	1856	1857	Removed.
Charles Smith	Northampton .	1857	1860	Resigned.
Luther V. Bell	Somerville	1857	1859	do،
Zebina L. Raymond.	Greenfield	1858	1859	do.
Franklin Ripley	Greenfield	1859	1860	Died in office.
Edward Dickinson .	Amherst	1859	1864	Resigned.
Walter Laflin	Pittsfield	1859	1866	Term expired.
Silas M. Smith .	Northampton .	1860	1863	do. do.
Charles Allen	Greenfield	1860	1861	Resigned.
Alfred R. Field .	Greenfield	1861	1864	do.
Edward Hitchcock .	Amherst	1868		Still in office.
Silas M. Smith .	Northampton .	1864	_	do. do.
Edmund H. Sawyer.	Easthampton .	1864	-	do. do.
Henry L. Sabin .	Williamstown .	1866	1876	Term expired.
Adams C. Deane .	Greenfield	1875	_	Still in office.
Henry W. Taft .	Pittsfield	1876	-	do. do.

TABLE No. 22.

Number of Persons other than Officers employed in the Regular

Duties of the Hospital.

C	CCUP	ATI	ons.				Males.	Females.	Total
Supervisors.	•			• .			1	1	2
Assistant Superv	isors		•		•		-	1	1
Assistant Clerk	•						<u>-</u>	1	1
Seamstress .	•		•			•	-	1	1
Assistant Seams	tress		•	•	•		٠ -	1	1
Laundress .				•	•		-	1	1
Assistant Laund	ress	•					-	1	1
Baker		•				•	1.	_	1
Assistant Baker	•		•		•	•	1	-	1
Steward .					•		1	-	1
General Attenda	nts			•	•	•	11	15	26
Housework, cent	re bu	ildi	ng				_	3	3
Cook			•		•		-	1	1
Assistant Cooks			•	•			1	3	4
Watchman .					•	•	1		1
Carpenters .		•					3	-	3
Painter .					•	•	1	-	1
Assistant Engine	er	•				•	1	-	1
Hostler .	•			•			1	-	1
Paver and Lawn	-dres	ser		•			1	_	1
Farmers .						•	7	-	7
Total .							31	29	60

TABLE No. 23.

Days' Work by Patients.

		FARM.		Kitchen.		SEWING- ROOM.	LAUNDRY.			
MONTHS.		Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total.	
1877. October		574	124	198	322	214	23	269	292	
	•					207		239	249	
November	•	55 8	120	215	335	207	10	239	249	
December	•	886	124	207	· 331	202	10	211	221	
1878.				ļ						
January .	•	384	124	213	337	232	11	228	239	
February .		367	112	189	301	202	10	218	228	
March .		406	124	209	833	229	10	224	234	
April .		627	120	198	318	219	22	226	248	
May		685	124	205	329	151	18	241	259	
June .		722	120	204	324	175	20	206	226	
July		782	124	211	335	213	23	254	277	
August .		788	124	207	331	202	11	240	251	
September	•	680	120	197	317	173	20	228	248	
Totals		6,959	1,460	2,453	3,913	2,419	188	2,784	2,972	

The total of days' work here recorded is 16,263. This is what was performed by the regular workers on the farm and in the three departments mentioned. No record was kept of the work on the ornamental grounds, at the stable, in the bakery, the boiler-room, and the carpenter's shop. A large amount of other work is done, both in the halls, and, at irregular times, out of them.

TABLE No. 24.

List of Articles made in the Sewing-Room, 1877-78.

Dresses .	•	•	•	•	243	Feather-ticks .	•		18
Shirts .					213	Sheets			305
Chemises					329	Pillow-cases .			436
Aprons .					140	Bolster-cases .	•		2
Sacks .			•		48	Roller-towels .			74
Camisoles					21	Dish-towels			271
Drawers					60	Napkins			12
Waists .			•		8	Table-cloths .			6
Skirts .					875	Bureau-covers .			23
Night-caps					12	Curtains			8 6
Night-dresse	28				32	Spreads (hemmed)			60
Suspenders	(pair	s)	•		151	Clothes-bags .			7
Collars .	•		•		122	Carpets (made) .			2
Hats (trimm	ied)		•		69	Carpet-strips (hemm	ed)		32
Mattress-ticl	k8		•		67	Flat-iron holders.			500
Straw-ticks					84	Sundries			13
Pillow-ticks	•		•	•	52	Articles repaired .	•	17	,632

TABLE No. 25. Upholstery done in 1877-78.

Hair Mattresses made, new materials						3
Hair Mattresses made, new ticks .		•		•		16
Hair Pillows made, new materials .						14
Hair Pillows made, new ticks						12
Husk Mattresses made, new materials		•				44
Husk Mattresses made, new husks .					•	83
Hair Mattresses re-made, hair re-picked						35
Hair Pillows re-made, hair re-picked			•			50
Husk Mattresses overhauled, with incress	ise o	f hus	ks			45

The huaks were sorted and split, the hair picked, and the mattresses filled and tied, by patients.

TABLE No. 26.

Officer and Employés. — Time Employed, March 1, 1878.

NAME.	Years.	Months.	Irays.
Pliny Earle, M.D., Superintendent	13	7	26
Edward B. Nims, M.D., 1st Assistant Physician .	9	2	14
Daniel Pickard, M.D., 2d Assistant Physician .	-	10	22
Walter B. Welton, Clerk	12	-	14
Asa Wright, Farmer	20	3	_
Danford Morse, Engineer	13	_	. 7
Robert H. Gallivan, Supervisor (temporary)	4	10	11
Lucy A. Gilbert, Supervisor	11	_	18
F. Josephus Rice, Steward	19	4	24
Mary Ward, Seamstress	7	6	3
Nell Russell, Laundress	-	11	8
Charles Ziehlké, Baker	15	6	_
Frances C. Earle, Assistant Clerk	6	3	6
Sarah Bryant, Assistant Supervisor	-	5	23
Kate Willard, Assistant Seamstress	_	7	7
Ellen Halladay, Assistant Laundress	4	4	25
Perry Davis, Attendant	8	4	16
Andrew N. Thorington, Attendant	7	1	30
Thomas Powers, Attendant	3	11	11
Alfred J. Cusson, Attendant	3	10	14
James Neill, Attendant	2	11	6
James Ahearn, Attendant	2	10	_
Charles S. Johnson, Attendant	2	8	1
Walter Pillinger, Attendant	3	9	29
Richard Neill, Attendant	1	_	19
Samuel L. Bolter, Attendant	_	2	_
Maria E. Graves, Attendant	10	1	7
Hannah Merrifield, Attendant	4	5	25
Martha R Harris, Attendant	3	6	7
Jane McGuire, Attendant	2	10	3
Ella Doolan, Attendant	2	6	27
Mary H. Huggins, Attendant	2	6	12
Atlanta J. McPhee, Attendant	2	5	12
Nellie M. Henchy, Attendant	2	2	2
Mary Ransom, Attendant	2	3	15
Victoria S. Shumway, Attendant	1	8	9
Cora Woodward, Attendant	1	4	10
		*	10

TABLE No. 26. — Continued.

NAME.			Years.	Months.	Days
Cécile Riel, Attendant			1	4	23
Ida J. Bowe, Attendant			-	9	14
Ella V. Griswold, Attendant			-	8	10
Florence F. Rice, Attendant			_	5	18
Julia B. Haskell, Cook			1	8	2
Emma Tower, Assistant Cook			2	_	6
Eva Dowe, Assistant Cook			_	8	. 8
M. J. Lavery, Assistant Cook		•	-	7	1
William Lacore, Assistant Cook			4	10	24
Harriet Aldrich, Centre			3	5	14
Elizabeth S. Welton, Centre		•	7	11	5
Harriet Halladay, Farmers' dining-room			3	7	11
William C. Hall, Assistant Engineer .	٠.		12	5	17
Nicholas Riel, Night Engineer			2	2	25
Samuel B. Cone, Watchman			-	11	22
Sifroi Belville, Carpenter			7	10	7
Waldy Tetro, Carpenter			4	11	23
Walter Tower, Carpenter			1	8	_
Alfred Parenteau, Painter			12	6	18
David Mercier, Hostler			1	-	14
Charles Egen, Assistant Baker			-	5	4
James Madden, Paver and Lawn-dresser			4	10	_
Benjamin Rockwell, Assistant Farmer.			10	9	_
John Mercier, Assistant Farmer	٠.		10	8	-
Eugene Sullivan, Assistant Farmer .			5	10	_
Orson J. Hill, Assistant Farmer		.	1	10	2
Elson E. Howes, Assistant Farmer .			-	11	23
William Commier, Assistant Farmer .			1	6	14
Julius Freeman, Assistant Farmer .			_	7	24

Twelve of the persons have not been in their present situations during the whole period of service; for example, the supervisors, the assistant supervisor, and the seamstress were formerly attendants.

Ten of the persons have been employed more than once. In these instances the table gives the total time of service.

TWENTY-FOURTH ANNUAL REPORT

O**J**

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT NORTHAMPTON,

FOR THE YEAR ENDING SEPTEMBER 30, 1879.

BOSTON:

Rand, Abery, & Co., Printers to the Commonwealth, 117 Franklin Street.

1880.

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OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

ADAMS C. DEANE, M.D			•		GREENFIELD.
HENRY W. TAFT, Esq				•	PITTSFIELD.
Hox. EDMUND H. SAWYER		•			Easthampton.
EDWARD HITCHCOCK, M.D.	٠.				AMHERST.
SILAS M. SMITH, Esq	• .				NORTHAMPTON.

RESIDENT OFFICERS.

PLINY EARLE, A.M., M.D	•	•	•	•	SUPERINTENDENT.
EDWARD B. NIMS, M.D.					FIRST ASSISTANT PHYSICIAN.
DANIEL PICKARD, M.D.					SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON.		٠,			CLERK.
ASA WRIGHT					FARMER.
DANFORD MORSE .	•				Engineer.

TREASURER.

PLINY EARLE	•	•	•	•	•	•	•	•	•	Northampton.
		0	PPICE	AT T	rum 1	HORPI	TAT.			

SUBORDINATE OFFICERS.

JEREMIAH E. SHUF	ELT					MALE SUPERVISOR.
LUCY A. GILBERT			•			FRMALE SUPERVISOR.
F. JOSEPHUS RICE		•				STEWARD.
MARY E. WARD .	٠.			•	•	SEAMSTRESS.
NELL RUSSELL .	•					LAUNDRESS.
CHARLES ZIEHLKÉ						BAKER.

^{*} Near the close of the official year Dr. Hitchcock resigned, and the Hon. William M. Gaylord was appointed as his successor.

Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To his Excellency the Governor of the Commonwealth and the Honorable Council.

In obedience to the requirement of the law, you are hereby presented with the Twenty-fourth Annual Report of the institution entrusted to our care.

One year ago, at the end of the official year 1877-78, the number of patients remaining in the Hospital was 429, of whom 215 were men and 214 women. The number admitted within the year which has elapsed since that time is, of men 63, and of women 43—making a total of 106. Thus the whole number treated in the course of the official year 1878-79 is, of men 278, and of women 257—or a total of 535. Of patients discharged, there were of men 40, and of women 30—a total of 70; and 14 men and 9 women—a total of 23—were removed by death.

The number remaining in the Hospital Sept. 30, 1879, was 442, of whom 224 were men and 218 women. The largest daily number of patients in the house was 446, which occurred on two days in July, 1879; and the smallest, 429, on three days in December and seven in January. The mean or average daily number for the official year was 436.

Of the 70 patients who left the institution, the recorded results of treatment are, — recovered, 26; improved, 28; unimproved, 14; sober, 1; and not insane, 1.

The affairs of the Hospital have been conducted very much in the usual manner, and with results at least ordinarily favorable. There has been no change in the staff of executive officers, either principal or subordinate, and but few changes of persons employed either within doors or

without. The general health of the whole household has been good, with entire exemption from epidemics, and but little acute disease. No fatal accident has occurred, and no case of self-destruction. The patients, to a large extent, have been industrious, and as contented as can reasonably be expected. Improvements on the farm and buildings have been continued, and the material effects of the establishment have been enhanced in value,—although suffering to some extent from a disaster produced by natural causes.

In our report one year ago, it was stated that an ice-house had recently been erected as a substitute for the old one, which was considered unfit for further use. The two were within a few feet of each other, and so stood until the great freshet of Dec. 10, when both were undermined and carried away in pieces. So far as possible, the remains of the new one were collected, and the material thus obtained was about half of what was required for the reconstruction of the building. The house was rebuilt, and filled with ice in January. The same stream that carried away the buildings entirely destroyed an embankment upon the premises, which had very recently been made, at an expense of over one thousand dollars, for the purpose of straightening and improving the road to the ice-house.

The irregular and unsightly grounds along the northern side of the Parsons lot, which forms the southern boundary of the road leading down the hill from the entrance gate, have been brought into seemly shape by a large amount of grading. An iron fence, corresponding with that on the northern side, has been erected along the road-line, through a distance of more than a thousand feet, and a row of elm trees set about twelve feet within the fence upon the Hospital premises.

There is a deep subsoil of clay upon both sides of this road, and in some places it so abounds in springs as to destroy the firmness of the stone posts which support the iron fence, although they are set to a depth of four feet. To prevent injury from this source, a cylindrical brick sewer, two feet in diameter, has been made upon either side of the road, with grated wells for the reception of surface-water. So far, they have effected their purpose admirably.

Concrete paths and sidewalks have been laid through a

distance of about two thousand feet, making access to the Hospital by foot-passengers from the village much more easy, cleanly, and comfortable.

The horse-barn has been greatly improved. The flat, tinned roof was taken off, and the wall of the northern side of the building torn down. An enlargement of ten feet upon this side was made; all the walls carried three feet higher than before, and surmounted by a slated, gable roof. The stalls, and all the other inside wood-work, except the joists, were taken out and replaced with new material,—the position of partitions being changed to some extent. Greater convenience, increased carriage-room, stalls for two more horses, and a hay-loft that will hold twenty or thirty tons more of hay than the old one, have been gained by this change.

During the last six months we have charged but three dollars per week for the board of town patients. Thus far our experience under this reduction goes to prove that, at this price, and with the present prices of provisions and supplies, the Hospital can continue to support itself, pay ordinary repairs, and annually add something in the way of improvement to the buildings or other parts of the premises.

The charges for the board of patients during the official year, are, —

For State patients .	•	•		\$33,961	63
town patients .				30,915	39
private patients	•	•	•	14,559	88
Total .				8 79.436	90

The Treasurer's Report gives an account, somewhat in detail, of the moneys received and expended, with the usual certification by the appointed Auditors that all the entries of disbursements are supported by proper vouchers. The balances of the accounts show, that at the close of the official year, Sept. 30, 1879, there were,—

Invested funds		\$10,000 00 23,539 77
And liabilities (bills payable)		\$33,539 77 5,290 87
Balance in favor of the Hospital	•	\$28,248 90 Digitized by GOOGLE

8 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

Beside the cash assets, the Hospital has on hand purchased provisions and supplies valued at \$11,631.34, together with a large quantity of products of the farm and the garden.

In closing, we may be permitted to say, that we have visited the Hospital at the regularly appointed times during the year, to a much larger extent than required by law; and that frequent visits, at irregular times, have been made by some member of the Board. We have at all times found the establishment in a satisfactory condition; and we believe it still to be as worthy of patronage, and as safe and reliable a home for the persons for whom it was intended as it has ever been in years gone by.

ADAMS C. DEANE. HENRY W. TAFT. EDMUND H. SAWYER. WILLIAM M. GAYLORD. SILAS M. SMITH.

NORTHAMPTON, Oct. 2, 1879.

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

A GENERAL summary of the financial accounts of the Hospital, for the official year 1878-79, is presented below. It contains an exposition of the receipts of money, and the several sources whence it came, as well as of the disbursements and the objects for which it was expended.

RECEIPTS.

Balance in han	ds of	Tre	asure	r, Se	pt. 3	0, 18	78, i	aclud	ing	•	
United-St	ates	bond			•					\$ 13,519	18
Received for boa	ırd aı	nd co	nting	encie	s of p	rivat	e pati	ients		15,031	58
Received for box	ırd aı	nd co	nting	encie	s of t	own j	patier	nts		33,767	88
Received for box	ırd aı	nd co	nting	encie	s of S	State	patie	nts		35,421	25
Received for ani	mals,	, proc	luce,	&c.,	sold	•				479	11
Received for sur	ıdry a	accou	nts		•	•	•	•	•	1,583	40
Total .		•		•	•			•		\$99,802	40
			Di	BUR	SEME	NTS.					
For provisions a	nd su	ıpplie	8.		•	•	•	•	•	\$22,024	21
fuel .	•	•			•	•	•	•	•	6,905	46
gas and oil	•	•		•	•	•		•		1,117	40
water .	•	•	•		•			•	•	800	00
salaries and	wag	res	•	•	•	•		•		21,457	14
medical sup	plies	•	•	•	•	•		•		1,405	54
furniture, b				ng	•	•	•	•		2,674	00
clothing and	dry-	good	s .	•	•		•	•	•	8,655	58
contingencie	8	•	•	•	•		•	•		1,025	31
farm .	•	•	•		٠.	•	•	•		3,164	63
farm stock	•	•	•	•	•	•	•	•		582	20
farm wages	•	•	•		•		•	•	•	4,420	93
real estate	•	•	•	•					•	235	00
iron fence			•		•	•	•	•		4,387	25
other impro				pairs	•		•			10,693	06
miscellaneou				•	•	•	•	•		1,138	41
Balance in han	ds o	f Tr	easur	er, i	nclud	ing 1	Unite	d-Sta	tes		
bond, Sej	ot. 30	, 187	9.	•	•	•	•	•	•	14,116	28
Total .									3	\$99,802	40

PLINY EARLE, Treasurer.

NORTHAMPTON, Oct. 2, 1879.

10 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

In pursuance of our appointment, we have audited the accounts of the Treasurer of the Hospital, and report that every entry is supported by a proper voucher.

ADAMS C. DEANE. EDMUND H. SAWYER.

NORTHAMPTON, Oct. 2, 1879.



SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

THE history of the recently-closed official year of the institution under your general guidance and guardianship, presents no remarkable features which might distinguish it from its predecessors. It furnishes no unusually favorable incidents or events, nor is it marred by any of those grievous occurrences to which institutions of the kind are peculiarly liable. It includes no suicide, and no accident fatal to human life. The subjoined table exhibits the movement of the population of the Hospital, and an epitome of the results of treatment:—

GENERAL STATISTICS, 1878-79.

Based upon the Number of Admissions and not of Persons.

							Males.	Females.	Total.
Patients in H Admitted in					•	:	215 63	214 43	429 106
Whole numbe Discharged, i				hin tl	1e y ea	ır.	278 51	257 89	535 93
Remainii	g Sep	t. 30,	1879	•	•		224	218	442
Conditi	on of I	Patier	ts Di	char	jed.				
Recovered .	•	•	•	•	•	•	13	13	26
Improved .	•	•	•	•	•	• 1	15	13	28
Unimproved	•	•	•	•	•	•	11	3	14
Sober	•	•	•	•	•	•	1	-	1
Not insane .	•	•	•	•	•	•	, -	1	1
Died	•	•	•	•	•	•	14	9	23
Total .	•	•	•	•	•		5 1	39	93
Daily average	numb	er of	patie	nts	•	-	221.31	215.42	436.78
Smallest num	ber on	any	day				_	_	429
Largest numb	er on	any d	av			.	_		446

One hundred and eight entries were made in the register of admissions within the official year. Two of them were of patients who were already in the Hospital, supported, one of them by his friends, and the other by a town, but who were re-committed for the purpose of throwing the cost of their support upon the State. Hence there were only one hundred and six admissions, as stated in the table.

Two persons were admitted twice each. Consequently the number of persons admitted was only one hundred and four. This exceeds, by twenty-eight, the number admitted in the next preceding year, and gives some reason for the expectation that, in future, the four most westerly counties of the State will furnish all the patients that can be accommodated at the Hospital. The number remaining in the house on the 30th of September, the close of the official year, is larger by thirteen than it was one year ago, and only seven less than it was on the 30th of October, 1877, after twenty-five patients had been removed to the Asylum for Chronic Insane at Worcester.

Of the one hundred and four persons admitted, thirteen men and eight women, a total of twenty-one, had previously been patients in this Hospital. Nine men and one woman, a total of ten, came for the *second* time; three men and four women, a total of seven, for the *third* time; three women for the *fourth* time; and one man for the *seventh* time.

Of the ten who came for the second time, four had been discharged recovered, four improved, and two unimproved, when they left the Hospital on their first admission. Of the seven who came for the third time, two had been discharged recovered on both of their former admissions; three had been discharged, each as recovered once and improved once; and two had been discharged, each as improved once and unimproved once. Of the three who came for the fourth time, two had been discharged recovered three times each, and one as improved three times. The man who was admitted for the seventh time had been discharged recovered four times, and improved twice.

STATUS OF PATIENTS.

Of the whole number of persons admitted, the cost of support for twenty-eight was charged to the State; that of fifty-

seven to cities and towns; and that of nineteen to individuals. Subsequently to admission, that cost was transferred from State to town in two instances, from town to State in one instance, and from an individual to the State in one instance.

The proportion of patients chargeable to cities and towns has been pretty rapidly increasing. On the 28th of September, 1872, there were but 94 patients of that class in the house. On the 30th of September, 1879, there were 184,—the number having been nearly doubled in the course of seven years.

Of the ninety-four patients who either left the Hospital or died, twenty-six were supported by the State, fifty-three by cities and towns, and fourteen by individuals, or by private funds.

Of the 442 patients remaining in the Hospital at the close of the official year, 202 are beneficiaries of the State, and 184 of cities and towns; while fifty-six are paid for by individuals, or by private funds.

The weekly average number of each of those three classes, as derived from the numbers in the house on the fifty-two Saturdays of the year, was, of State patients, 200.34; city and town patients, 182.29; private patients, 54.23; total, 436.86. The difference between the weekly average and the daily average is only thirteen-hundredths of a unit.

RECOVERIES.

Thirteen men and thirteen woman, a total of twenty-six patients, were discharged so far relieved from their mental aberration as to warrant the record of recovery in each of their cases. Be it understood that, while in the opinion of the medical officers this was the proper thing to do, no pretension is made that each of those persons respectively was cured beyond the liability to a relapse, or a recurrence of the disorder. So far, indeed, is this from being true, that in six or seven of the cases the tendency to insanity is so inherent in the constitution, or so engrafted upon it, that the disease will almost inevitably reappear; and in several others the probability of its return is great. Already is there some evidence of such return, inasmuch as one of the men, who was pronounced recovered by his friends, had not been at home

two months before he ended his life by suicide. Be it farther and very distinctly understood, that this discouraging prospect in regard to a large proportion of the patients discharged recovered, is no new thing, this year, at this Hospital, and no new thing in regard to hospitals generally. It is the same always, and every where. From the very nature of mental disease it must be so. But, while this is true, there is always the consolation and the recompense that, among any considerable number of so-called recoveries, there are some in which the cure is essentially permanent.

Of the twenty-six persons discharged recovered, twenty-three had never before been inmates of this Hospital. Of one person, this was the second admission, and of two, the fourth admission; and each of these three persons has been discharged recovered at every admission: making, now, for one of them, two recoveries; and for the other two, four recoveries each. The three have recovered ten times.

Seven of the twenty-six persons were supported by the State, fourteen by cities and towns, and five by private funds.

DEATHS.

Twenty-three patients died in the course of the year, - a number which precisely corresponds with that of the deaths of the next preceding year. The coincidence extends even farther, since the numbers of each sex were alike in the two years; namely, fourteen men and nine women. As the whole number of patients treated, and the daily average number in the house, were both somewhat less than in that year, the proportion of deaths is a trifle larger. Both years, however, rank among the lowest, in respect to mortality, in the whole history of the institution: the year just closed having but two years below it in the proportion of deaths calculated upon the daily average number of patients in the house. As usual, by far the largest proportion of deaths were the result of chronic disease; but there were two from pneumonia, and one from congestion of the lungs. The largest number (four) from any one disease, were from that gradual wasting of the whole frame, which is so common among the insane, and which is known by the term "marasmus." Three deaths each are attributed to pulmonary consump-

tion, epilepsy, the exhaustion of acute mania, and old age; and one each to congestion of the brain, serous apoplexy, disease of the liver, and cancer of the stomach.

Of the twenty-three persons who died, one was a private patient, seven were wards of the Commonwealth, and fifteen were supported by cities and towns.

Suicide. — Again are we permitted gratefully to acknowledge the lapse of another annual period without a case of self-destruction, and thus to add one more to the no inconsiderable series of years during which the institution has been free from those distressing terminations of life. As was stated in the report for 1877-78, the last suicide occurred on the 27th of January, 1872. This was a little more than seven years and eight months ago. At that time there were 415 patients in the house; and during the intervening period 1,116 have been admitted; making a total of 1,571 that have been under our care in the course of that period.

The Hospital has been in operation twenty-one years, and its total of suicides is twelve. Ten of them occurred within the first ten years, and but two within the last ten. In the mid-way year there was none. During the first ten years the daily average number of patients was 336, and during the last ten it has been about 444.

The annual record of mortality in the Hospital, from the time of its opening, may be seen in the following table:—

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Deaths and their Ratios, from Sept. 30, 1858, to Oct. 1, 1879.

OFFICIAL	Whole	: Daily Average No. of		DEATHS.		Per Cent on Whole No.	Per Cent on Daily Average	
YEAR.	Patients.	Patients.	Men.	Women.	Total.	of Patients treated.	No. of Patients	
1858-59,	313	229.55	7	12	19	6.07	8.27	
1859-60,	398	255.96	9	18	27	6.78	10.54	
1860–61,	434	314.26	15	15	30	6.91	9.54	
1861-62.	442	313.80	9	10	19	4.29	6.05	
1862-63,	470	355.28	19	7	26	5.53	7.31	
1863–64,	475	357.63	17	30	47	9.89	13.14	
1864-65,	469	342.40	17	24	41	8.76	11.97	
1865-66,	488	376.35	18	13	81	6.35	8.23	
1866–67,	543	401.03	23	24	47	8.65	11.71	
1867-68,	565	413.41	25	18	43	7.61	10.40	
1868-69,	590	405.10	13	12	25	4.23	6.17	
1869-70,	604	408.83	22	11	33	5.46	8.07	
1870-71,	616	421.90	16	12	28	4.54	6.64	
1871-72,	619	428.72	19	18	37	5.97	8.63	
1872-73,	614	437.23	13	8	21	8.42	4.80	
1873-74,	626	469.54	14	11	25	3.99	5.32	
1874–75,	629	475.35	23	18	41	6.52	8.62	
1875–76,	629	474.21	18	19	87	5.88	7.80	
1876–77,	603	476.16	21	21	42	6.96	8.82	
1877-78,	551	442.43	14	9	23	4.17	5.19	
1878-79,	535	436.73	14	9	23	4.29	5.27	

The proportion of deaths for the full period of twenty-one years, as calculated upon the whole number of patients annually treated, is 6.01 per cent; and as calculated upon the daily average number of patients in the Hospital, 8.21 per cent.

The proportions for the first ten years are, on the whole number of patients treated, 7.08 per cent; and on the daily average number, 9.71 per cent.

For the last ten years, they are, on the whole number of patients treated, 5.12 per cent; and on the daily average number, 6.91 per cent.

The proportion of deaths during the first ten years, is to the proportion of deaths during the last ten years, as 140 to 100, if calculated upon the whole number of patients treated; and as 138 to 100, if calculated upon the daily average number of patients in the house.

As usual, the proportion of deaths of men largely exceeds that of women.

WORSHIP AND ENTERTAINMENT.

The long established practice of frequently gathering the patients for public worship, or for exercises intended for their instruction, entertainment, or amusement, was continued through the year. Of the 365 days, there were assemblies for these purposes on 331 days. Upon the sabbath, they took place in the afternoon; upon all other days, in the evening. Of the 34 days upon which there were no assemblies, thirteen of the omissions were in consequence of the meetings of the Trustees, and six because of the visits to the Hospital of public authorities delegated by law to inspect it. The appended schedule contains an exposition of the nature of the several exercises, and the frequency of each:—

1.	EXERCIS	SES ON TE	er Sab	BATH	, —							
		Divine we	orship	•	•	•	•	•	•	•	52	days.
2.	Exercis	ses on S	ECULAR	EVE	NING	s, —						
	(a.)	Readings	, openin	g and	closin	g with	sacr	ed mu	sic : -	_		
		The Bibl	е.	•		•					27	days.
		The Bibl	e, and	electi	ons o	f pro	s e				10	44
		The Bibl	e, and	electi	ons o	f poe	try		•		23	66
		Miscella	eous se	lectio	ns of	prose	· .				73	66
		Miscellar	eous se	lectio	ns of	poeta	у.				64	44
		Miscellar	eous se	lectio	ns of	prose	and	poetr	у.		42	44
	(b.)	Lectures,	opening	and	closin	- g with	sacre	d mu	sic : –	_		
	, ,	Atmosph	eric air	, with	use	of air	-pum	р.			8	66
		Island of	Malta	•			¯.				1	44
	(c.)	Other ente	ertain m e	nts: —	-							
	` '	Pictures	shown '	with t	he ste	reopt	icon				6	44
		Concerts				•					7	44
		Recitatio	ns .				•	•			7	44
	(d.)	Social ga	therings	:								
	` ,	Quadrille	_								16	"
		No assen	-		. •	•	•	•			84	44
		Tota	al.		_	_		_			865	dava.

As usual heretofore, the pastors of several of the denominational churches in the neighborhood conducted the sab-

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bath services. For two of the concerts we are indebted to Miss Lizzie Longley and Mr. John Prince; and for the stereoptic exhibitions, to Dr. T. W. Meekins.

FARM.

Under the able immediate management of Mr. Wright, who has had the charge of it ever since the Hospital was opened in 1858, the farm continues in its course of progressive improvement. The quantity of the total products of the present season is fully equal, for the purposes of home consumption, to that of any preceding year, although its monetary value, in consequence of the prevalent prices, has at some times been exceeded. The crop of hay, though large, was less than that of 1878, a year of remarkable productiveness of that staple material. But potatoes yielded abundantly, and of a quality superior to those of any other season during the last fifteen years. The product of the earliest planting of the Early Rose was at the rate of three hundred and seventy-five bushels to the acre, - a yield that recalls to memory the years gone by, and would seem to indicate that there is once more "a good time coming" for that important vegetable.

SCHEDULE OF PRODUCTS.

Hay (first growth of hor	me f	arm),	863	tons,	at \$1	4	•		\$ 1,214	50
Hay (second growth, hor	me f	arm)	, 25 į	tons,	at \$1	4	•		357	00
Hay (first growth, Parso	ns l	ot), 1	6 ton	s, at	\$ 14	•			224	00
Hay (second growth, Pa	rson	s lot)	, 5 t	ons, a	at \$14	ŀ.	•		74	62
Hay (first growth, Clark	e or	chard), 16	d tons	s, at (14	•	•	231	00
Corn fodder, 15 tons	•		•	•					60	00
Oat straw, 12 tons.							•	•	72	00
Corn, 400 bushels .						•			240	00
Oats, 400 bushels .	•								200	00
Broom-seed, 100 bushels	;	•		•			•		25	00
Potatoes, 3,442 bushels									1,731	00
Carrots, 407 bushels	•		•						162	80
Beets, 1,176 bushels	•			•					476	00
Onions, 800 bushels	•	•				•		•	150	00
	•	•	•			•		•	100	00
Parsnips, 20 bushels							•	•	10	00
Beans, Lima, in shell, 10)4 <u>‡</u> 1	bushe	ls				•		209	00
Beans, common, in shell	, 114	l busl	nels	•	•	•	•	•	114	00
Beans, string, 30½ bushe	ls	•	•	•	•	•	•	•	47	00

Amount carried forward

Digitized by GOOGIC

Amount brought fore	oard				•				8 5,697	92
Beans, Lima, dry, 10 bi										00
Peas, green, in pod, 118									127	
Sweet corn, green, in ea			shels				•		194	
Tomatoes, 122 bushels									122	
Lettuce, 911 bushels										50
Cucumbers, 108 bushels	ı								108	
Squashes, summer, 301		els							80	50
Squashes, winter, 6,540									98	10
Melons, 7,850 pounds			•						78	50
Asparagus, 874 bushels									129	00
Pie-plant, 24 bushels									18	12
Beet-greens, 11 bushels									9	00
Cabbages, 5,000 heads									200	00
Currants, red, 61 bushe		•			•	•			26	00
Currants, black, & bush					•				2	00
Apples, 145 barrels									290	00
Pears, 261 bushels				•		•			3 8	50
Grapes, 11 bushels	•	•	•		•				1	50
Quinces, 21 bushels	•	•							7	50
Beef, raised here, 1,889	poun	ıds		•					148	72
Veal, raised here, 693 p	ound	8	•	•		•			68	04
Pork, 13,569 pounds	•								691	11
Pigs, sold, 116 .						•			259	10
Turkeys, 227 pounds	•			•					46	79
Chickens, 901 pounds									11	65
Chickens, spring, 20									10	00
Heads and plucks .						•	•		83	50
Eggs, 112 dozen .	•			•		•		•	22	85
Milk, grass-fed, 19,327	quart	8	•			•	•		966	85
Cider, 5 barrels .	•			•					15	00
Broom-brush		•			•	•	•		30	00
Calf-skins, 7	•	•	•			•			8	75
Roasting pigs, 7 .	•	•	•	•	•	•		•	14	00
Wood, 15 cords .	•	•	•	•		•	•		. 45	00
Total value .									89.680	50

The aggregate value is less than in 1878, in consequence, partly, of the diminished valuation of hay, and partly of a much smaller crop of apples, and a much less quantity of wood cut upon the farm. In 1878 we had eleven hundred barrels of eatable apples, made one hundred and forty-five barrels of cider, and cut one hundred and forty-five cords of wood, the larger part of which was sold.

The garden, of something more than twenty acres, which lies near the buildings, has been greatly improved in fertility

within the last ten years. Aside from a liberal use of the ordinary fertilizers, several thousands of loads of "meadow-mud," or imperfect peat, have been spread upon it; and to this, within the last year, has been added five hundred loads of clay. As in some parts the soil is too sandy for high fertility, these substances improve it by their power of absorbing and retaining moisture.

The whole quantity of milk produced was 19,327 gallons; but, as usual, only one quarter of it is entered in the list—the quantity estimated to be the direct product of grazing, and not from hay, grain, and roots, included and appraised in the table. For a similar reason, no mention is made of butter, of which we make about five hundred pounds, or of manure, of which the product is not far from six hundred cart-loads.

Twenty-nine hogs, which were raised and fattened upon the Hospital premises, were slaughtered in the course of the official year. The dressed weight of them individually was as follows: 460, 436, 495, 391, 559, 380, 473, 440, 426, 482, 507, 446, 640, 761, 375, 449, 480, 180, 504, 500, 473, 467, 407, 444, 464, 525, 500, 492, 413. Total weight, 13,569 pounds. The mean or average weight of the heaviest ten of them was 548 pounds; and that of the heaviest five, 598 pounds. They supplied the house with both salt pork and lard for the year, together with one barrel of the former, and one tierce of the latter, for sale. We purchase a very small quantity of fresh pork, sausages, and ham. The sausage-meat from our own pork is eaten in fried rolls, when new; and the hams are cured here, but smoked off the premises.

No meats are bought by general contract. Throughout the warm season they are ordered from day to day, as wanted, and at prices temporarily agreed upon, and consequently fluctuating. In the latter part of the autumn we annually purchase about one hundred sheep, and eighteen or twenty three-years-old beeves, stable and feed them on the premises, and slaughter them, as wanted, in the course of the coldest four months.

The farm stock now on hand consists of 7 horses, 8 oxen, 1 bull, 32 cows, 31 fat hogs, 3 boars, 20 breeding sows, 18 shotes, 30 small pigs, and an average quantity of poultry.

HOW THE HOSPITAL IS SUPPORTED.

Although a State institution, this Hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bill of its patients, and the small sum of ten dollars each for the burial expenses of State patients who die in the Hospital. The receipts from the lastmentioned source during the past year, were seventy dollars.

For the entire support of State patients, including clothing, and all loss from breakage and other kinds of destruction, the Hospital received three dollars and fifty cents each per week from the treasury of the Commonwealth, from April 1, 1870, to April 1, 1879. Since the latter date, it has received but three dollars each per week. This is the compensation fixed by statute law. Nearly one-half of the inmates belong to this class. During the past year the weekly average of them was 45 85 per cent of the whole.

For town patients it has received, and now receives, from the treasuries of the towns, respectively, in which those patients have legal settlements, the same sum per week as from the State treasury for State patients; but the towns clothe their patients, and remunerate the Hospital for damages done by them. Of town patients, the weekly average for the year was 41.04 per cent, or a little more than two-fifths of the whole.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1879, was five dollars, five cents, and four mills each per week. Clothing and damages are extra charges. The weekly average of these patients during the past year was 12.41 per cent, or one-eighth of the whole.

The average weekly pay per capita, received by the Hospital for all its patients, State, town, and private, in the course of the year, is three dollars and forty-nine cents and eight mills. Such are the pecuniary resources of the Hospital. We turn to the results of

THE FINANCE OF THE LAST FOURTEEN YEARS.

In April, 1865, the Hospital was freed from debt, and the financial statement at the close of that month showed a

balance of three hundred and two dollars and four cents in its favor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of five thousand dollars, in two appropriations, for specific purposes,—one of two thousand, and the other of three thousand dollars.

As an offset to the five thousand dollars' bonus, the Hospital has purchased and paid for several lots of land, amounting to about one hundred and forty-four acres, the total cost of which was \$22,790. The State, then, has been overpaid for its bonus in the sum of \$17,790.

The amount paid by the Hospital for repairs and improvements in the course of the fourteen years, from Sept. 30, 1865, to Sept. 30, 1879, is \$171,781.65.

The surplus of cash assets now on hand is \$28,248.90, or \$27,946.86 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing now on hand, are estimated to have cost \$11,631.34. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$9,181.34.

The value of household furniture in the Hospital is, at a low estimate, at least ten thousand dollars greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called eight thousand dollars. Collecting these several sums, the account of debit of the Commonwealth to the Hospital appears to be as follows:—

Excess of cost of land over direct bonus		\$17,790 00
Repairs and improvements		171,781 65
Excess of present cash assets		27,946 86
Increase of provisions and supplies .	•	9,131 34
Increase of furniture	•	8,000 00
Total	_	\$ 234.649 85

The necessary current repairs of the buildings may be estimated at three thousand dollars annually. Deducting this sum for each of the fourteen years since Sept. 30, 1865, a total of \$42,000, there is a remainder of \$192,649.85. To this amount, then, has the Hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

STUDIES RELATIVE TO THE CURABILITY OF INSANITY.

Articles suggested by investigations of the subject of the curability of mental disorders have occupied a portion of several of the preceding annual reports of this Hospital. Those investigations have to some extent been continued, and some of the results thereof will here be presented. It has already been shown that, in consequence of the repeated recoveries, as reported at the hospitals, of more or less of those patients who are admitted into them more than once, taken in connection with the fact that the general readers of the reports have no means of discovering that every one of these duplicate or multiple recoveries does not represent a separate, individual person, the people at large have been brought to believe that insane persons are much more frequently cured than the facts will warrant. Within the last three years, several superintendents have begun to give such explanations of the recoveries reported by them as may prevent the false inference alluded to, and consequently act as correctives of the erroneous public opinion. planations have revealed a state of things which shows that it is no cause for marvel that the public mind has been deceived upon the subject. For example, at the New-Hampshire Asylum for the Insane, in the official year 1878-79, there were twenty-seven recoveries; but Dr. Bancroft so arranges them in tabular form, that we learn that only eleven of them were recoveries from a first attack. Sixteen of the persons had previously been reported recovered, - two of them once each, eight of them twice each, one of them four times, one of them eight times, one of them nine times, and one of them thirty-five times. After this last reported recovery, the total of the reported recoveries of these sixteen persons is ninety-two.

This is a remarkable proportion of recoveries subsequent to the first, and, undoubtedly, larger than that of most of the hospitals. The New-Hampshire Asylum is among the old institutions, and these secondary recoveries increase in number with the advancing age of the hospital. But, in the face of such facts as these explanations reveal, those superintendents who do not thus explain the recoveries reported by them, need not be surprised if it should come to be believed

that they are quite willing that the deception of the public mind should be continued.

In my report for 1877-78, surprise was expressed that some method of giving the reader of their reports a correct understanding of their reported recoveries in this respect had not been adopted at the British asylums. Among the reports received from them in the course of the year last past, there are two in which something of the kind has been introduced.

At the Prestwich Asylum, in 1878, there were 214 recoveries. The superintendent, Dr. H. Rooke Ley, writes, in relation to them, that "175 had never before been treated in this asylum, and had therefore recovered from a first attack; of 25, this was the second admission; of 8, the third admission; of 2, the fourth admission; of 2, the fifth admission; of 1, the sixth admission; and of 1 the seventh admission. The recorded condition, when discharged, of the 39 who had previously been under treatment in this asylum, was, recovered in 38 instances, and improved in 6 instances,—consequently, 92 recoveries have been contributed to the statistics of this asylum by these former residents."

This, so far as I am informed, is the first exposition of the kind in England.

W. H. Garner, Esq., Medical Superintendent of the Clonmel District Asylum, Ireland, in his report for 1878, says,—"The discharges amounted to 31 of both sexes, being an average (per centage?) of over 35 on admissions. Of these latter, however, I am bound to say, 17 were relapsed cases; so that, as has been well pointed out by Dr. Pliny Earle of the State Lunatic Asylum at Northampton, U.S.A., the percentage of recoveries on admissions must be taken cum grano salis."

Of the 31 patients discharged, 28 were reported recovered, and 3 improved. Please observe the noteworthy fact, that, while 28 were discharged recovered, 17 were received who had previously been discharged recovered. The excess of recoveries sent out into the world, over the recoveries which the world had sent back, was only nine.

A "study" is now introduced to which I especially invite the careful attention of all persons interested in the subject. How dry soever may be its aspect, let them give it a

thoughtful reading, and perhaps they will discover that they have been amply repaid.

IT IS THE END THAT CROWNS THE WORK.

"While it appears that once almost every patient recently attacked recovered, our statistics show that now, taking our hospitals together, hardly half of them have been so fortunate." — Dr. RAY, in Recoveries from Mental Disease.

"O, blindness to the future! kindly given,
That each may fill the circle marked by heaven."
POPE.

The object of this chapter is to recall to notice a few of those recoveries of the insane which took place not less than thirty-five years ago, at a time included in that period to which Dr. Ray alludes as one that was so exceedingly favorable to restoration from mental disorders.

In an examination, a few months ago, of a reprint, in 1863, of the thitherto published reports of the Illinois Hospital for the Insane, I met a table copied from the report of the Worcester Lunatic Hospital for 1843, and re-published, in connection with a memorial by Miss Dix, for the purpose of showing the remarkable advantage, pecuniarily, of the treatment of insanity in its early stages. It presents two columns, or series of cases, twenty-five in each. Those in the first column were chronic and incurable; those in the second were recent, and had been discharged—all of them "recovered"—from the said hospital in the course of the official year covered by the report.

The official year at that time ended with the 30th of November, and not, as now, with the 30th of September.

While studying the table, it occurred to me that it would be interesting to know the history, subsequent to their discharge, of the twenty-five persons who recovered after so short a period of treatment, and at so trifling an expense. Such was the inception of this chapter, and this the cause for the selection of the table of 1843, in preference to either of its predecessors. The first table of the kind was published, if I mistake not, in the Worcester report for 1837–38. The practice was continued for a series of years, and was adopted at various other institutions of the kind. Indeed, the report

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for 1843, which contains the table, gives the results of similar tables at the State hospitals of Maine, Ohio, and Virginia. The table is here introduced, in order that the reader may obtain a clear understanding of the subject.

"Table showing the Comparative Expense of Supporting Old and Recent Cases of Insanity, from which we learn the Economy of placing Patients in Institutions in the early periods of Disease.

No. of Cases.	Present Age.	Time Insane.	Total Expense at \$100 a year before a fore refering the Hospital, and \$132 a year, \$120.	No. of the Recent Cases discharged	Present Age.	Time Insane.	Cost of Support at \$2.30 per	¥ 68 F.
2	69	28 yrs	\$ 3,212 00	1,622	30	7 wks	s. \$16	10
7	48	17 "	2,004 00	1,624	34	20		
8 1	60	21 "	2,504 00	1,625	51 -	32 "		60
12	47	25 "	2,894 00	1,635	23	28 "	1	
18	71	34 41	3,794 00	1,642	42	40 "		
19	59	18 "	2,204 00	1.643	55	14 "	32	20
21	39	16 "	1,993 00	1,645	63	36 "	82	80
27	47	16 "	1,994 00	1,649	22	40 "	92	00
44	56	26 ''	2,982 00	1,650	36	28 "	64	40
45	60	25 "	2,835 00	1,658	36	14 "	0.5	
102	53	25 "	2,833 00	1,660	21	16 "	60	
133	44	13 "	1,431 00	1,661	19	27 ''	1 0-	
176	55	20 ''	2,486 00	1,672	40	11 "	1 20	
209	39	16 "	1.964 00	1,676	23	23 "	0.5	
223	50	20 "	2,364 00	1,688	23	11 "	20	
260	47	16 "	2,112 00	1,690	23	27 "	0-	
278	49	10 "	1,424 00	1,691	37	20 "	10	
319	53	10 "	1,247 00	1,699	30	28 "	01	
347	58	14 "	1,644 00	1,705	24	17 "	1 00	
367	40	12 "	1,444 00	1,706	55	10 "		
400	43	14 "	1,644 00	1,709	17	10 "	20	
425	48	13 "	2,112 00	1,715	19	40 "		
431	36	13 "	1,412 00	1,716	. 35	48 "	110	
435	55	15 "	1,712 00	1.728	52	55 "	1-0	
488	37	17 "	1,912 00	1,737	30	83 "	75	90
		454 yrs.	\$ 54,157 00			635 wks	s. \$ 1,461	30
Averag	e expe	nse of old	cases	• •		•	\$2,166	20
Whole	expens	se of 25 ol	d cases -				54,157	00
		nse of rec		•	•	•	58	
1,5	-		cent cases til	l recovere	ď		1,461	

[&]quot;The results of this table are so striking, and show so conclusively the importance of early admission to the insane hospitals, that many other institutions have instituted the same inquiry with similar results." (See Report of the Worcester Lunatic Hospital for 1843.)

The report contains no assertion that the twenty-five recent cases were permanently cured; neither does it allude to the probability, or the possibility, that any one of the persons might again become insane: hence the almost inevitable impresssion left upon the mind of the general reader, by a perusal of the table, would be, that the twenty-five persons whose insanity was recent had never before been insane; and that now, on the first attack of that disease, they were returned to their homes and to society fully and permanently restored to mental soundness. Indeed, the whole force of the table depends upon the assumption that they were permanently cured. Furthermore, coupled with this impression would be the inference that, if the twenty-five persons whose disease was chronic had been taken to a hospital in the early stages of their mental unsoundness, they, too, would have been cured. Then follows the practical deduction: If you send your insane friend early to the hospital, his cure will cost but \$58.45; if you neglect such early action, his support, while insane, will cost at least \$1,461.30. This deduction was, apparently, the whole ostensible object of the table.

Taking, then, these twenty-five persons, so happily, so quickly, and so cheaply withal, redeemed, by restoration, from one of the greatest ills that flesh is heir to, let us, while learning something of their antecedent history, go forth with them from the hospital, and, so far as is practicable, follow them to the present time, if they still are living, or through their subsequent life, if that life be ended.

THE TWENTY-FIVE RECENT CASES RECOVERED.

No. 1,622.—This was a man, and this was his second attack of insanity, but his first admission to the hospital. He was discharged recovered, as in the table, May 1, 1843. Within about three weeks after the table was made, and on the 20th of December, 1848, he was again committed to the hospital. He remained a little more than three months, and was again discharged recovered March 25, 1844.

¹ It is assumed that the table was made on the 1st of December, because the official year ended with the 30th of November. It could not have been made before the 28th of November, because two of the patients represented in it were discharged on that day. Eight of the others were discharged in the course of that month.

He afterwards married, and it is believed that he has never been insane since he left the hospital. He was well, and living with his family, one year ago, as he probably is now. This information comes from one of his friends who visited him in 1878.

No. 1,624.—A woman. This was her second attack of insanity, the first one having occurred two years before her admission to the hospital. The case is recorded as periodical and suicidal. She was discharged recovered, as in the table, June 21, 1843. An informant writes me, September, 1879,—"She is living, and is apparently in good health. I was not able to find out whether she ever became insane again or not."

No. 1,625. — A man. This was his second admission into the hospital. He was admitted the first time in July, 1840. He remained less than two months, and was discharged recovered Sept. 17, 1840. He was discharged recovered the second time, as in the table, Sept. 25, 1843. He was admitted the third time Jan. 8, 1851, and nearly eight months afterwards, on the 29th of Aug. 1851, discharged recovered for the third time.

His father and a son were insane. On his third admission, his case is recorded as "periodical, once in about four or five years." Hence it appears that there must have been one attack between the last two admissions to the hospital.

Since the foregoing was written, I have learned that he had another attack in 1859, which lasted nearly a year. He was not taken to a hospital, but was cared for at home. After recovery he remained well until 1872, when he died of cholera morbus.

His wife and the son above mentioned, were patients at the Worcester Hospital, and the former died there.

No. 1,635. — A man. Insanity is hereditary in his family. He was discharged recovered, as in the table, Oct. 11, 1843. He still lives and is in business. One of his relatives states (1879) that he "has not been insane since he left the Worcester Hospital;" and that he "is somewhat eccentric, but in no wise insane."

No. 1,642. — A man. The case is recorded as hereditary and suicidal. Discharged *recovered*, as in the table, June 21, 1843. He was admitted again Nov. 19, 1844, and dis-

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charged recovered, the second time, Feb. 18, 1845. He was admitted the third time July 14, 1856, and died within less than thirty-six hours afterwards.

On his last admission, it is recorded that a sister and a brother were insane, and that his son "hung himself one year ago."

No. 1,648.—A woman. Her father was insane, and she had had two previous attacks of insanity, "some twenty years ago, in two successive springs." After a residence of a little more than three months in the hospital, she was discharged recovered, as in the table, July 1, 1843.

Her subsequent history is related to me, in dialogue form, by a correspondent who received it in conversation with one of the nearest relatives of the woman, and a member of her family.

Question. - " Was she cured at the hospital?"

Answer. — "Oh, no! She was just the same as she had previously been; very despondent most of the time; and she was constantly watched, —not that we feared her doing harm to others, but that she might harm herself."

Question.—" There was no change, after her going to the hospital, in her condition from what it had been previously?"

Answer. — "Oh, no. She continued the same until her death, in 1854."

Question. - "What was the cause of her death?"

Answer.—"She was run over by the cars. Most people thought it might have been by accident, but we could not tell."

No. 1,645. — A woman. This was her third admission to the hospital, and she was admitted four times afterwards. Her record is as follows:—

First admission, Aug. 2, 1838; discharged recovered Jan. 10, 1839.

Second admission, April 26, 1840; discharged recovered Nov. 6, 1840.

Third admission, April 29, 1843; discharged recovered, as in the table, Nov. 1, 1843.

Fourth admission, May 31, 1845; discharged recovered June 23, 1846.

Fifth admission, Jan. 25, 1849; discharged recovered May 8, 1851.

Sixth admission, Nov. 6, 1855; discharged recovered May 13, 1856.

Seventh admission, Jan. 12, 1857; died at the hospital, of "old age," April 22, 1857.

It is recorded, on her second admission, that her insanity was hereditary and periodical; and, on her fifth admission, that two of her brothers and one sister were insane.

No. 1,649. — A man. Admitted May 10, 1843; discharged recovered, as in the table, Nov. 17, 1843. An informant writes that he is now living and well; and that he has shown no signs of his previous trouble for a number of years." As it is nearly thirty-six years since he left the hospital, this language would seem to imply that he has shown signs of the disorder since the time of discharge.

No. 1,650. — A woman. Admitted May 11, 1843; discharged recovered, as in the table, Sept. 12, 1843. She is still living, and "has never shown any symptoms of insanity since she left the hospital."

No. 1,658.—A woman whose mother was insane. She was admitted May .22, 1843, and discharged recovered, as in the table, July 27, 1843. In about two weeks after the table was made, and on the 18th of December, 1843, she was again committed to the hospital. She was discharged recovered, the second time, March 15, 1844.

Since she left the hospital she has had two attacks of insanity, one of them following childbirth; but they were not severe nor of long duration, and she was not taken to a hospital. She is now living and well, the mother of twelve children, ten of whom are living.

No. 1,660.—A woman. She had had one previous attack of insanity; and in the table on page twenty-three of the Worcester report for 1843 her case is recorded as periodical. Her mother and a sister were insane. She was discharged recovered, as in the table, Aug. 23, 1843. One of her nearest relatives states, that "after her discharge from the hospital, in 1843, she remained well a few months, when she again became insane, was recommitted, and again discharged. In 1846 she was again placed in a hospital, and again discharged, and was never well but a few months at a time. She died in 1849, aged about twenty-eight years." It is said that she died of scrofula. Her commitment in 1846 was to the

Worcester Hospital, from which, after a residence of thirty-seven days, she was discharged recovered.

No. 1,661. — A young woman, whose insanity is recorded as hereditary. She was admitted May 24, 1843, and discharged recovered, as in the table, Nov. 7, 1843. She was admitted again May 10, 1847, and discharged recovered, the second time, Sept. 30, 1847. Admitted the third time, Dec. 3, 1849, and discharged recovered, the third time, March 20, 1850.

I am informed that she "again became insane, and went to the hospital in New Hampshire;" this was on the 14th of December, 1853. She was removed to the McLean Asylum, Sept. 6, 1854, "where she remained, insane, until her death, July 5, 1867. Age, 44 years."

No. 1,672.—A man. His disease is recorded as periodical in the table on page 24 of the Worcester report for 1843. He was admitted June 10, 1843, and discharged recovered, as in the table, Aug. 18, 1843. He is now (1879) in the almshouse of a town, an officer of which writes to me as follows: "He never was cured. He is a foolish, harmless fellow. He was taken from the hospital (in 1843) to our almshouse, where he now is, in fair health, able to do very little light work; simple and harmless when pleased, but ugly when crossed very much."

No. 1,676.—A woman. This was her third attack of insanity, and her second admission to the hospital. Her first admission was on the 24th of May, 1842. She was discharged recovered July 4, 1842. The second admission, as in the table, was on the 13th of June, 1843. She was discharged recovered Nov. 16, 1843. I am informed that she "remained well, after her return from the hospital, as long as she lived, which was not many years. I think she died about 1850."

No. 1,688.—A young woman. This was her fourth admission to the hospital. Her first admission was on Aug. 20, 1836. She was discharged recovered Oct. 28, 1836. Her second admission was on Jan. 19, 1839; discharged recovered July 4, 1839. Third admission, Aug. 7, 1840; discharged recovered Nov. 25, 1840. At this admission her case was recorded as periodical. Her fourth admission was on June 30, 1843. She was discharged, as in the table, recovered, for the fourth time, Sept. 11, 1843. On the last admission it is

stated that she was twenty-two years of age; consequently she could have been but fifteen at the time of her first admission. After her fourth recovery and departure from the hospital, I am informed that "she married, went West, lived with her husband some years, and was in an insane asylum out there."

Having returned to Massachusetts, she was admitted into the Taunton Lunatic Hospital, March 18, 1864, and discharged therefrom, recovered, Nov. 30, 1864. She was committed to the Worcester Hospital for the fifth time, Aug. 5, 1865, and nearly two years afterwards, on the 28th of June, 1867, was discharged not improved. She was taken directly to the almshouse of the town which supports her, and there she still remains. "She works in the family, and is quiet," writes my informant; "but at times is wild."

No. 1,690.—A young woman. Admitted July 5, 1843, and discharged recovered, as in the table, Oct. 21, 1843. About five years afterwards, in 1848. she died of consumption, not having been insane after she left the hospital.

No. 1,691. A woman. Admitted July 8, 1843, and discharged recovered, as in the table, Oct. 16, 1843. She died on the second anniversary of her discharge, Oct. 16, 1845. I am not informed whether her insanity re-appeared. Probably it did not.

No. 1,699.—A man. Admitted July 20, 1843, and discharged recovered as in the table, Nov. 15, 1843. Of his subsequent condition, one of his nearest relatives writes (1879) as follows: "He has never been what we call insane since he came home; but he has had spells of nervous excitement, when he would not sleep well, and then he would be full of his talk, and very nervous, for from four to six weeks. He is never violent, but easily excited if he is opposed. His nervous spells are generally once a year, not always, and then in cold weather. We feel anxious about him, fearing he may be insane."

No. 1,705.—A woman. Admitted July 25, 1843, and discharged recovered, as in the table, Nov. 27, 1843. She was admitted the second time July 5, 1848, and discharged recovered Dec. 5, 1848. Admitted the third time Dec. 27, 1851, and discharged recovered, for the third time, July 16, 1852. On the 19th of July, 1856, she was admitted into the

Taunton Lunatic Hospital, where she died of consumption on the 17th of October of the same year.

No. 1,706. — A woman. This was her second attack of insanity, the first having occurred in 1823. She was admitted July 26, 1843, and discharged recovered, as in the table, Sept. 26, 1843. She remained sane during the rest of her life, and died Feb. 8, 1869, aged 80 years.

No. 1,709.—A young man. Admitted Aug. 7, 1843. The record on admission states that "he has had previous attacks," and that "he has a brother insane now;" and in the table on page 25 of the Worcester report for 1843, his case is called periodical. He was discharged recovered, as in the table, Sept. 26, 1843. Ten days afterwards, on the 6th of October, 1843, he was admitted the second time. This must have been several weeks before the table was finished, because the official year did not end until Nov. 30, and no less than thirteen of the other patients referred to in the table were discharged after the 6th of October.

He was discharged the second time improved, Jan. 11, 1844. The records of this admission state that he "received an injury on the head many years since, from which he never entirely recovered." Although discharged the last time only "improved," he afterwards became so well that he married. He subsequently left New England, and died somewhere in the Middle or the Southern States. It is not known that he ever had another attack of insanity after he left the hospital; but a person who knew him well from early life, while he remained in New England, says that "he was always a weak-minded man."

No. 1,715. — A young woman. This was her second admission into the hospital in 1843, and she was admitted three times afterwards; and, on this admission, the case is called periodical in the table on page 25 of the report for 1843. Her record is as follows: First admission, April 8, 1843; discharged improved June 12, 1843. Second admission, Aug. 16, 1843; discharged recovered Nov. 28, 1843. Third admission, Feb. 18, 1846; discharged recovered June 30, 1846. Fourth admission, Nov. 13, 1846; discharged recovered June 15, 1847. Fith admission, Oct. 19, 1847; discharged recovered July 12, 1852.

Her last term of residence in the hospital, as will be per-

ceived, was more than four years and eight months. The record of her second admission says that she "has had fits," and that her "mind (is) not sound at any time." On the third admission it is recorded that the case is periodical, and that "for three weeks past (she) has had frequent convulsive fits daily."

This case is as interesting as it is remarkable. Notwithstanding the foregoing history, she has since married, and borne two children, and is now living and well.

No. 1,716.—A woman. The earliest information we have of her is, that on April 30, 1830, at the age of twenty-one years, she was admitted into the McLean Asylum. She was discharged therefrom, July 31, 1830, much improved. She was admitted at the Worcester Hospital, as in the table, Aug. 18, 1843. The records state that this was her fourth attack of insanity, and that each attack followed childbirth. She was discharged recovered Nov. 28, 1843.

On the 30th of April, 1849, she was admitted at the Butler Hospital, Providence, R.I., where she remained sighteen months. She was removed thence, by her husband, Oct. 8, 1850; and four days afterwards, on the 12th of October, 1850, she was admitted the second time at the Worcester Hospital. The records of this admission contain the following statements: "Insane for twenty years; was here seven years ago; now has not worked for more than three years." She died at the Worcester Hospital, of consumption, March 6, 1851.

No. 1,728.—A woman. Admitted Sept. 7, 1843. The records state that she had had "occasional symptoms of derangement for ten years," and that the disease was hereditary. She was discharged recovered, as in the table, Nov. 23, 1843. She was not admitted again; but I have learned through her relatives, that no permanent benefit was derived from her treatment in the hospital. Says my informant,—"She had been at home from the asylum but very few days before she was as bad as before going," and "her mental condition remained the same throughout life." She died of consumption Nov. 5, 1854.

No. 1,737.—A woman. Admitted Sept. 23, 1843. Her disease is recorded as hereditary, and she had a brother in the Worcester Hospital. She was discharged, as in the table, recovered, Nov. 22, 1843.

She is still living. My informant writes of her as follows: "She was and is a Second-Advent woman. She believes that there is no salvation except through her creed, and in so far is a monomaniac in religion; but is right in all other respects, and is in excellent health, as she has been always since her discharge from the hospital in 1843."

And so we come to the end of the table, and — to an end of its argument. Time and history sometimes deal rudely with the most sanguine hopes and the most beautiful devices of men. The really surprising results of this investigation are suggestive of extended comment, but they must be dismissed by a brief reference to one or two points.

- 1. Of all the hitherto-published representations of the curability of insanity, the most unfavorable is that of the late Dr. Thurnam, who based a general formula upon the actual results in 244 persons (treated at the York, England, Retreat), whose history he had traced until death.
- "In round numbers, then," says he, "of ten persons attacked by insanity, five recover, and five die sooner or later during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die."

Let us compare the results in these twenty-five persons, recovered at the Worcester Hospital, with Dr. Thurnam's formula. According to the latter part of the formula, of the twenty-five persons, —

- (a.) Ten should never have a second attack;
- (b.) Fifteen should have a second attack and perhaps more; and
 - (c.) Of these fifteen, ten should die insane.

But we find that, in fact, admitting that the twenty-five reported recoveries were recoveries, then, under the most favorable construction, there were of the twenty-five

- (a.) Only seven who did not have a second attack;
- (b.) Eighteen had more than one attack;
- (c.) As so many are still living, it is impossible to say what will be the final result in regard to the number dying insane. But already five have died insane at the hospitals, and two have died insane at home, making a total of seven. Two others are at almshouses, both having for a long period been

incurably insane (they will undoubtedly die so), and one has died at home, who "was never well [sane] but a few months at a time."

It is no exaggeration of the unpleasant aspect of these results to say that they are no more favorable than Dr. Thurnam's formula represents. Their near approximation to that formula is somewhat remarkable.

2. Can our statisticians, philanthropists, and statesmen longer be surprised that the hospitals do not put a stop to the increase of insanity?

Alcoholic Insanity in the Hospitals. — Mr. Henry W. Lord, Secretary of the Michigan State Board of Charities and Correction, has recently published a pamphlet, entitled "Hospitals and Asylums for the Insane," in which, for the purpose of illustration, he introduces a hypothetical institution for six hundred patients. Supposing it to be fully occupied, he proceeds to estimate the number of patients suffering under each of the several forms of insanity who will be found within its walls. This estimate is undoubtedly based upon the knowledge of the subject which he has derived from observation of the hospitals of Michigan, and, perhaps, of other States in that section of the country. Among the six hundred patients of his supposed hospital, he says,—

"There will be found from 30 to 50 whose malady is euphoniously called dipsomania, many of whom though wildly, often violently or dangerously insane, when committed to the institution, are cured within twenty-four hours,—and permanently cured, if permanently restrained; but they rarely stay long before means are taken to enlarge them, and they, in a few weeks or months, are discharged cured,—some of them perhaps several times each,—and their cases go to make up the averages of recoveries in official reports."

Admitting this as an approximately accurate representation of the actual condition of the Western hospitals in respect to patients, the cause of whose disease is intemperance in the use of intoxicating liquors, it is no longer difficult to account for the high percentage of recoveries in some of those institutions. In an examination of their official reports, I have more than once come to the conclusion that, among their patients, there must be a large number, either of those whose

disease is the transitory mental disturbance produced by strong drink, or of those whose insanity is periodical or recurrent, and who have been discharged "recovered" several times; but never before have I seen any thing which apparently threw so much light upon the subject as this extract. In former reports I have alluded to the fact that, in some institutions, the statistics of recoveries from insanity have heretofore been pretty largely swollen by cases of delirium tremens and its kindred conditions, which are forms of mental disorder not usually recognized as insanity proper. Mr. Lord gives good reason for the inference that this continues to be true.

The proportion of these cases of intemperance, as indicated in the extract, appears to be large. It is certainly much larger than it ever was at this institution, and very much larger than it is at present. Indeed, we have no case originating in drunkenness, other than those of insanity proper, such as may continue, and, in most instances, will continue through life.

Dr. RAY'S ESSAY.

Under the title, "Recoveries from Mental Disease," Dr. Isaac Ray has recently published an essay, suggested by what has been written upon the same subject in the last three annual reports of this Hospital, and in a pamphlet entitled "The Curability of Insanity," which was read before the New-England Psychological Society, in December, 1876.

In regard to the essay as a whole, it is submitted that its statement and general representation of my argument is not quite fair. At the opening of his argument, Dr. Ray says, "He (Dr. Earle) finds, as a general fact, that thirty or forty years ago, the proportion of recoveries, or cures as they are sometimes called, was much larger than it has been of late years. . . . This remarkable difference Dr. Earle attributes to two sources of error committed by those who reported the large proportion of recoveries." He then proceeds to state that these two sources of error are, in general terms, first, the temperament of the person reporting the recoveries; and, secondly, the duplicate, and sometimes multiplicate, recoveries of the same person, whereby the recoveries of cases are made to appear much larger than recoveries of persons.

Now, so far from assuming the decreased number of recoveries as my premises or proposition, it was one of the objects of the paper to prove that there has been such a decrease. The attempt to prove it is not made until near the close of my essay; and the fact of that decrease is made the seventh and last deduction from the whole discussion. Futhermore, strange as it may seem, neither of the "two sources of error" is anywhere alleged to be the cause of that reduction.

After having considered the two sources of error, and arrived at the conclusion that they do not satisfactorily account for the reduction in the number of cures, Dr. Ray says, "As, then, neither the temperament of the physician, nor the repeated counting of periodical cases, accounts for the larger proportion of recoveries, in the earlier times, we must look for the explanation in another direction, and we shall find it in various agencies that have come into operation in later times." He goes on to explain that these agencies are, in short, first, the admission to the hospitals of a larger proportion of incurables; and, secondly, the increased incurability of the disease.

As before mentioned, my aim was to demonstrate that such a reduction or diminution has taken place, and not to show the causes of it. And yet those causes are briefly alluded to, on p. 48 of "The Curability of Insanity," as follows: "If the causes of the general reduction of the proportion of recoveries, as stated under the seventh head, be sought, some of them will be found in, or inferred from, preceding portions of this discussion.

"Among others are, first, the probable fact that, as institutions have multiplied, the proportion of chronic and incurable cases taken to them has increased; and, secondly, the not improbable fact that insanity, as a whole, is really becoming more and more an incurable disease. If it be true, as asserted by that accomplished scholar and profound thinker, Baron Von Feuchtersleben,—and doubtless no one will deny its truth,—that in the progress of the last few centuries, as civilization has advanced, and the habits of the race have been consequently modified, disease has left its stronghold in the blood and the muscular tissues, and at length seated itself in the nervous system, it follows, perhaps, as a necessary consequence, that by a continuation of the cause of this change,

the diseases of the brain and nerves must become more and more permanent." And in my annual report for 1876-77, I say,—"As hospital accommodations have increased, more and more of the large class of the chronic insane, who formerly remained among the people, are thus removed from their homes" to the hospitals; and I then proceed to quote from six authorities, showing that the same state of things is found in Great Britain.

Thus, when Dr. Ray becomes dissatisfied with the two agencies assumed by him to be those to which I attributed the reduction of recoveries, and looks "for the explanation in another direction," he is not obliged to look beyond the writings which he is criticising; and four or five pages near the close of his paper are essentially only a mere elaboration of the ideas contained in the paragraphs just quoted.

Not only have I not alleged the "two sources of error" as causes of the reduction of recoveries, but I never, even in thought, assumed or believed them to be, to any considerable extent. The reporting of multiple recoveries certainly cannot be, because more have been reported of late years than thirty or forty years ago. The older the hospital, the larger the proportion of such recoveries. In regard to the other "source of error," - the diversity of temperament of the different reporters, -it may and it may not have tended to reduce the number. The only stated object of the essay on "The Curability of Insanity" is, to ascertain whether the popular belief in the great curability of insanity is justified by facts. The general scope of that essay is asserted (p. 4) to be "a review of the subject of the curability of insanity." This made the field of discussion so broad that the influence of temperament was legitimately mentioned, rather as a curious phenomenon, and hence a matter of general interest, than as one of the agents the influence of which has reduced the number of recoveries. And it is introduced, not as necessarily either a diminisher or an enlarger of recoveries, but as an "influence which has an important effect upon the proportionate reported restoration." In one instance that effect may be to reduce, in another to increase. And I perceive no reason why its effect was any greater, either way, thirty or forty years ago, than it is now, other than its stimulation, at the former period, by the more active zeal and rivalry

among the superintendents of the hospitals. So far it undoubtedly did exert an effect of increase, at that time; and, as the stimulation has subsided by the less active rivalry, the effect is now towards a reduction.

The remarkable instance adduced in my pamphlet, in which one superintendent, at Worcester, reported, in a period of three years, ninety-five per cent more recoveries than were reported by his successor in a period of the same duration; and another instance, mentioned in the report for 1877–78, of this hospital, in which one superintendent of the McLean Asylum, during a period of seven years, reported one hundred and twenty per cent more recoveries than did his successor in a similar period,—both occurred within the last fifteen years.

Even Dr. Ray, himself, not only acknowledges, in no less than three different places in his essay, that this difference of temperament has affected the statistics of recoveries, but he enters into a somewhat extended argument to prove that it has, and that, in the nature of the human constitution, it cannot be otherwise. Nevertheless, he does "question whether it has had all the influence attributed to it" by me, inasmuch as I "think it has sometimes led to a difference in the number of recoveries as reported amounting to twenty-five per cent." Here, again, Dr. Ray does not quite accurately represent the author whom he criticises. I did not write "has sometimes led;" but I did express my long-existing belief that "the number of cases reported as recovered might differ at least twenty-five per cent, according to the man who might act as judge of their mental condition." But that is unimportant; the error of representation may be regarded as trivial. I still retain the belief; and for the benefit of persons who would prefer the concrete to the abstract, I will relate an anecdote. Within the last three months, in conversation with the superintendent of a large American hospital, - a physician who has enjoyed the acquaintance of both of the exsuperintendents about to be mentioned, - I said, "I believe that if, when Dr. Ray and the late Dr. Rockwell (of the Brattleboro' asylum) were in active service, it could have been possible for both of them, each in his respective institution, to have treated the same patients, and to have discharged them in the same condition, we should have had, for

every seventy-five recoveries reported by Dr. Ray, no less than one hundred reported by Dr. Rockwell." Here is a difference, not alone of twenty-five, but of thirty-three and one-third per cent; and yet the superintendent to whom I spoke immediately over-endorsed the opinion with the remark,—"I think there would be more difference than that." Hence as, in the days of Molière, there were fagots and fagots; so, now, there are opinions and opinions.

The general misconception and misinterpretation of the writings under his review has necessarily vitiated many of the minor parts of Dr. Ray's argument; and more than once in these he places me in an entirely false position. Thus, for example, he alludes to my use of the statistics of the Friends' Asylum at Frankford, and represents me as employing them for the purpose of accounting for the diminution of the number of recoveries in the course of the last thirty or forty years. I used them for no such thing. I used them, as Dr. Ray may readily perceive by a reference to the essay, for the purpose, primarily, of showing that (at any and at all times), in consequence of repeated admissions of the same person, the percentage of cases that recover is generally larger than that of persons that recover; and, secondarily, by such showing, to illustrate the method by which the people at large have received the impression that insanity is a far more curable disease than it really is. It would seem that Dr. Ray wrote his essay, not with my pamphlet, or my reports, before him, but rather with a confused memory of their contents, as derived from a hasty perusal of them at some period comparatively remote. Throughout his essay he is almost constantly firing at a target of his own, all the time laboring under the delusion, and all the time leading his readers to believe, that he is firing at mine.

Assuming, erroneously, that the Frankford statistics were used as an explanation of the comparatively fewer recoveries in the later than in the former years, he says that, by them, "the proportion of recoveries in recent cases is reduced from 58.35 per cent to 48.39 per cent. This amounts to a reduction of only about 17 per cent of the larger number." My argument was briefly this,—The people have been taught to believe that from 75 to 90 per cent of insane persons can be cured. The Frankford statistics, the best we have, show

but 65.69 per cent of recoveries. These recoveries are of cases, not of persons. Rejecting the re-admissions, we find that the recoveries of persons were but 58.35 per cent. But these were not permanent recoveries. So many of the recovered persons were re-admitted that the real proportion of persons who recovered permanently was only 48.39 per cent. Hence, instead of having 90, or 80, or even 75 insane persons permanently cured, in each hundred of the acutely insane, these statistics show that, at Frankford, only 48 (48.39) were so cured. Some persons will probably think that to be a pretty important difference.

It would occupy too much time and space to follow the Doctor through the other similar mistakes and perversions in his essay. There are, however, some other things that may be noticed. In allusion to the recoveries at Frankford, he says, "We doubt if in any other hospital the discharges have been at the rate of one patient recovered fifteen times; another, thirteen; a third, nine; a fourth, eight; and a fifth, seven." "Nothing easier," writes Dr. Hack Tuke, "than to make sweeping statements without proof." It is no less easy to make a statement that rests upon a doubt. The Doctor was evidently in a doubting mood when his paper was written. Permit me to dispel the doubt in, at least, this one instance.

The total of recoveries of the five persons at Frankford is fifty-two.

At the Hartford Retreat, five persons have been reported recovered as follows: one, fourteen times; another, thirteen; a third, nine; a fourth, nine; and a fifth, nine. Total recoveries of the five persons, fifty-four.

At the Bloomingdale Asylum, as long ago as the year 1845, five men had been reported as recovered, — one of them, seventeen times; another, thirteen; a third, twelve; a fourth, eleven; and a fifth, ten. Total recoveries of the five, sixty-three.

At the same institution, at the same time, five women had been reported recovered, — one, twenty times ¹; another, nineteen; a third, seven; a fourth, seven; and a fifth, six. Total recoveries of the five, fifty-nine.

Taking the highest five of both of these sex-groups of

¹ This woman afterwards increased her recoveries to forty-six, or only six less than the total of the five persons at Frankford.

Bloomingdale patients, one of them recovered twenty times; another, nineteen; the third, seventeen; the fourth, thirteen; and the fifth, twelve. Total recoveries of the five, eighty-one.

At the Worcester Hospital, five men have been discharged recovered, — one of them fourteen times; another, fourteen; the third, twelve; the fourth, nine; and the fifth, nine. Total recoveries of the five, fifty-eight.

At the same institution, five women have been discharged recovered,—one of them, twenty-two times; another, sixteen; the third, fifteen; the fourth, fourteen; and the fifth, eleven. Total recoveries of the five, seventy-eight.

Uniting these two sex-groups of Worcester patients, and taking the highest five of them, one recovered twenty-two times; another, sixteen; the third, fifteen; the fourth, fourteen; and the fifth, fourteen. Total recoveries of the five, eighty-one.

At the New-Hampshire Asylum at Concord, even among the twenty-seven patients discharged recovered in the official year 1878-79, there were five, the number of whose recoveries has been, — one of them, thirty-six times; another, ten; the third, nine; the fourth, five; and the fifth, three. Total recoveries of the five, sixty-three. The number of recoveries of these five persons is larger, by eleven, than that of the five at Frankford; but of all the patients ever treated at Concord, the highest five were as follows: one recovered thirty-seven times; another, sixteen; the third, eleven; the fourth, ten; and the fifth, ten. Total recoveries of the five, eighty-four.

In every one of the instances here adduced, the "rate" of recoveries is higher than that of the Frankford patients; and in that of either the Bloomingdale Asylum or of the Worcester Hospital, it is fifty-five per cent higher; while in that of the Concord Asylum, it is sixty-one per cent higher.

Should any vestige of doubt still remain, perhaps it may be obliterated by the fact that, at the Concord Asylum, ten persons have recovered a total of one hundred and twenty times, or an average of precisely twelve recoveries to each. This rate, however, is not quite so high as that of the abovementioned ten patients (five men and five women) at Bloomingdale, or as of the ten at Worcester. At the former the ten patients recovered one hundred and twenty-two times, and at the latter one hundred and thirty-six times.

Again, Dr. Ray writes as follows: "Dr. Bell had good reason for saying, in his report of the McLean Asylum for 1840, 'that the records of this asylum justify the declaration that all cases certainly recent, — that is, whose origin does not, either directly or obscurely, run back more than a year, — recover under a fair trial.'"

It may be assumed that Dr. Bell had equally good reason for saying, as he did say, in 1857, applying his opinion of the general curability or incurability of insanity to the case of an individual, - "I have come to the conclusion, that when a man once becomes insane, he is about used up for this world." In 1840, when he wrote the extract quoted by Dr. Ray, he had been but four years in the specialty, and his experience was comparatively small. Seventeen years afterwards, when the latter expression of his opinion was given, that experience was greatly enlarged, and it is not unlikely that he had had the opportunity to learn, in the later history of the patients who recovered in the earlier years of his residence at the McLean Asylum, the frequency, and often the permanency, of subsequent attacks, such as the reader of this report may learn in the preceding account of the twenty-five patients discharged recovered from the Worcester Hospital in 1843. Though decided in his opinious, Dr. Bell's mind was open to conviction; and, when those opinions were altered, he had the independence, the manliness, to acknowledge it.

In regard to repeated recoveries of the same person, Dr. Ray remarks, — "The Doctor (Earle) himself leaves it in doubt whether he would require us to report no case as recovered which has been so reported on any previous occasion. He certainly prescribes no rule to be observed." Dr. Ray must have either overlooked or forgotten the first paragraph on page 33 of my report for 1877-78, from which the subjoined extract is taken:—

"Nowhere in my essay is it asserted that the calculation of recoveries should not be made upon cases. I have always pursued that method, and I do not perceive in what way it can be avoided. All that I have insisted on is, that the reports of recoveries shall be accompanied by an explanation, by which the reader can learn whether those recoveries are from first attack, or from attacks varying from the second to the thirtieth, the fortieth, or the fiftieth; whether, if you

report ten recoveries, it is to be understood that ten different persons have really recovered, or merely that one person has recovered from ten successive attacks. The inability to convey this information is the grand fault in the general method of reporting, and by this fault public opinion has been grossly misled."

"Many of the instances of repeated recoveries mentioned by Dr. Earle," remarks Dr. Ray, "were periodical in their character. . . These, certainly, were not recoveries, in any true sense of the term." But, in most instances - in every instance but one, I believe - they were reported as recoveries, and hence one cause of the prevailing misapprehension in the public mind in regard to the curability of insanity. The exceptional instance is that of the cases at the Pennsylvania Hospital, in which I inferred that a patient had been reported recovered thirty-two times, from the fact that he is reported to have had thirty-three attacks. But, in allusion to those cases, Dr. Ray says, - "We learn from Dr. Kirkbride that no periodical case was ever discharged (at the Pennsylvania Hospital) as recovered." Referring to page 37 of Dr. Kirkbride's report for 1878, I find a table "showing the number of the attacks in 7,867 cases," with the following explanation: "This table shows, that of the entire number admitted, five thousand six hundred and ninety-five were suffering from their first attack of insanity, one thousand two hundred and fifty-nine from a second attack, four hundred and twenty-one from a third, and so on, till thirteen were laboring under a ninth attack when received into the institution. All these were distinct attacks of insanity, and, after the first, had been developed subsequently to recoveries from a previous attack or attacks of the disease."

According to this explanation, a part of the cases which, in "The Curability of Insanity," are taken from the report for 1875 of the Pennsylvania Hospital, were, as I inferred them to be, cases that had recovered from each previous attack. In the ninety-four persons admitted on the fifth attack, and the one hundred and seventy-two persons on the fourth attack, the disease was not periodical, but every patient had recovered from each of his previous attacks. The one hundred and seventy-two persons admitted on the fourth attack had, consequently, previously recovered a total of five hun-

dred and sixteen times, making the number of previous recoveries three hundred and forty-four greater than the number of persons. That will do very well. It is sufficient to illustrate my point, that the reported recoveries largely exceed the number of persons that recover. Or if it be not, it may now be supplemented by the thirteen persons mentioned by Dr. Kirkbride in the above explanation, as "laboring under a ninth attack when received into the institution." These thirteen persons had already recovered eight times each,—a total of one hundred and four recoveries.

In all instances where the person has had ten attacks or more, Dr. Kirkbride classes the case as periodical; and, according to Dr. Ray, not one of these cases has ever been discharged as recovered from the Pennsylvania Hospital. But in all instances in which the number of attacks has been less than ten, the case is not periodical, and the patient really does recover from each successive attack; and, of course, when he leaves the hospital, is reported as recovered. This may be a good method of classification, but the propriety of its universal adoption is doubtful. It might lead to difficulty. Not every physician possesses that acuteness of mental vision by which, when a patient has apparently recovered from his second, third, fourth, or fifth attack, he can determine the question whether that patient is going to have, in all, only nine attacks, or whether, on the contrary, he will have ten. If he cannot decide that point, he will not be able to classify the case as periodical or not periodical; and if he cannot so classify him, he will not know whether to report him as recovered or not recovered! This would be greatly embarrassing. Again, supposing that, by a mistake not unlikely to occur, he should report a patient as recovered nine times in succession, and the patient should then have a tenth attack. Another embarrassment, from which there would be no relief but by letting those nine recoveries (like the sick man's reconciliation with his neighbor, in case the sick man should recover) "go for nothing," inasmuch as that tenth attack has proved that they were not recoveries! It is even somewhat singular that, of the no inconsiderable number of periodical cases at the Pennsylvania Hospital, not one of them has had less than ten attacks. It might reasonably be supposed that there would be at least one or two not farther advanced than the seventh or the eighth attack. Digitized by Google

In allusion to my remark, that "if a person have a thirtythird attack of disease, it necessarily follows that he had previously recovered from thirty-two attacks," my reviewer exclaims, - "This is a tremendous jump at a conclusion based on the vague signification of a single word." My impression is, that if, to one hundred physicians, it were asserted that a person has had five attacks of insanity, the instant inference of ninety and nine of those physicians would be, that the person had recovered from each of the first four attacks. The hundredth and exceptional man would probably be Dr. Ray. But, be this as it may, it is questionable whether the two contestants in this matter are quite old enough yet to begin to accuse each other of exalted skill in gymnastics. For one, I am perfectly willing that the audience shall decide which of the two was the greater leap, mine, in drawing the inference as expressed in the above quotation, or Dr. Ray's, in bounding from the beginning to the end of my essay, and mistaking one of my conclusions for my premises.

In all that I have written upon the controverted subject under consideration, I have intended constantly to represent as a dominant idea, that public opinion has been greatly misled by the method of reporting recoveries at the hospitals. Dr. Ray comes to my assistance in the pamphlet before me, from which I make the following extract, the last two of the three series of italics being mine,—

"It may well be doubted whether the terms recovered, improved, much improved, have been of any use not more than balanced by their inevitable tendency to mislead the reader respecting the curability of insanity. But the public have always wished to know particularly what the hospitals were doing, and, as often happens, thought that the information sought for was to be found in a parade of vague general expressions."

In conclusion, it is maintained and submitted that not one of the seven conclusions in "The Curability of Insanity" is either refuted, or in any wise weakened, by any thing in the "Recoveries from Mental Disease."

SUPPORTERS.

Under the peculiar circumstances by which I was environed at the time of the publication of the essay upon the

curability of insanity, and which still exist to a certain extent, I have considered it justifiable to publish some of the comments which it has elicited from its readers. To those already given to the public in the two reports next preceding this, are now added a few, selected from those which have been received within the year last past, several of them suggested by the "studies" on the subject contained in the report for 1877-78. I do it the more willingly in consequence of the interesting and valuable suggestions contained in some of them. No one of the writers resides in Massachucetts, and only two of them in the New-England States.

"I am greatly pleased," writes a physician who is a member of the board of trustees of a large State hospital, "with the proofs you have given that the per cent of cures of the insane has been greatly overrated. There is indeed a wide distinction to be made between the cures of cases and the cures of persons."

The superintendent of a hospital, in a remote state says,—"I thank you for the result of your studies on the curability of insanity, as indicated by statistics. Your discoveries, I confess, were startling, and though a little unpleasant, are strongly supported by facts."

A physician in general practice, but who has been connected as assistant-physician with two of the State hospitals, writes as follows:—

"Your pamphlet on the curability of insanity I wish particularly to thank you for. The picture you draw is dark, but gives intense satisfaction by the careful and truthful way in which it is drawn. If you cannot always cure, you do give much relief, and make hundreds comfortable who would otherwise have lived most wretched, much abused lives. Not only would I thank you for the courtesy itself, but also for the labor which you took upon yourself to present the truth to us in so comprehensible a form."

The next extract needs no introduction or explanation,—
"After seven years on our Board of Charities and Corrections, on my second year of new six years' term, not once have I had such clear exposition of my views of insanity, and practical views in reports of cures, &c., as in your '78 report."

"As to the curability of insanity," says a physician great-

ly interested in the subject of insanity, but never engaged in the practice of the specialty, "I worked out a part of the problem a few years since, but did not dare publish my results, as I knew that, not being in an insane asylum, they would be scouted. The Australian illustration is startling; but then look at the recoveries in our city asylums, like New York and Flatbush and Philadelphia."

There is great good sense in the subjoined remarks of a physician who has not only read extensively, but thought profoundly, upon the whole subject of mental disorders and their treatment.

"The views you have presented so ably, and confirmed by such irrefragable testimony, cannot fail of having a powerful effect in stimulating the profession to seek for better methods for the treatment of the insane. It seems to me that there has been progress made in the pathology of insanity, though I am afraid very little in the treatment. Suppose we were to revert to the earlier practice in part, giving the patient less of cosseting and coddling, and more of open-air life and actual employment for his muscles in daily toil, where there is a possibility that he can endure it. . . . I have no sympathy with the mere theorists who are demanding constantly that we should have institutions established here on the model of Gheel, for they do not know what they are talking about; but this increasing incurability of insanity, with the constant increase in the number of the insane, is an opprobrium on the skill and ability of the profession which should be removed if possible. Lectures and processional walks, and chemical experiments, libraries, &c., are all very well in their way, but the amusement which appeals most powerfully to the insane patient, is labor according to his strength; especially if he is to be paid for it. . . . I am aware that, with your large and admirably managed farm, and your other appliances, you are doing much in this way; but, with your severe winters in Massachusetts, is it not possible to do more in your workshops? I want to ask that you, who have had the courage to show the lack of success of the past treatment of the insane, should demonstrate, as I believe you can, that "there is a better way," not by establishing a commune of the insane, not by the cottage system, but by a more thorough open-air treatment and the successful extension of active employment." Digitized by Google A fit conclusion is found in the views of Professor Ordronaux, himself a teacher of psychology in its legal relations, as well as Commissioner in Lunacy of the State of New York

"You have presented some very striking statistics in relation to the mistaken curability of insanity. Our pathological investigations all tend to show that nerve tissue is among the slowest to repair its lesions, and that, even in cases of supposed repair, the quality of the new tissue is so far inferior to the original, that all functions dependent upon it must forever after be performed in a less perfect way. Under the shadow of these natural laws, it seems to me that much of what we call "recovery" from insanity, consists only in a diminution of its most salient and obtrusive features, and that there remains behind a permanently weakened brain ready to give way under any exceptional strain."

I cannot properly conclude this report without an open recognition of the favor granted by your Board, which has enabled me to visit seventeen institutions for the insane which I had never seen before. Two of them are in the State of New York, two in Pennsylvania, two in Canada, two west of the Mississippi River, and the others in the Western States which lie north of the Ohio River. Most of these visits were necessarily brief, but yet they were sufficient to furnish a general idea of the location, structure, equipment, and management of each institution respectively. And it would be a dereliction of both inclination and duty, were I to neglect an acknowledgment of the attention, the courtesy, and the generous hospitality extended to me by the officers of the institutions visited.

With, as I believe, a sufficient knowledge of European establishments of the kind to enable me to form an approximately just opinion, I returned from this journey in the confirmed belief that the United States need not shrink from a comparison of her hospitals and asylums for the insane with those of any other country.

The valuable reading matter of the Hospital has been increased in the course of the year by several volumes of reviews and magazines presented by Miss Julia Clark, for the Northampton Book Club; a quantity of religious newspapers from the Rev. J. S. Pearce, and Messrs. Bridgman

and Childs; a collection of religious and miscellaneous pamphlets from Eleazer Porter, Esq., of Hadley; a copy, weekly, of "The Christian Register," from its publishers; and two copies, weekly, of "The Staaten Zeitung," from its publisher. To all those who have been thus thoughtful of our household are extended my cordial thanks.

Nor would I, in closing, forget the expression of my obligation to each and all of my co-workers who have conscientiously endeavored to perform their duty, as well as to you, gentlemen of the Board of Trustees, who hold the first place of responsibility to the Commonwealth and the people for the proper management of this important charity.

PLINY EARLE, Superintendent.

NORTHAMPTON, Oct. 2, 1879.

APPENDIX.

TABLE No. 1.
Admissions, 1878-79.

	M	Males.	Females.	Total.					
October, 1878							6	2	8
November .	-	•	•	•	•		4	l ī l	5
December .	•	-	•	•	•		$ar{2}$	1 4 1	6
January, 1879	•	•	•	•	•	· 1	ĩ	l î l	2
February .	:	•	•	•	•	•	ŝ	6	11
March		•	•	•	•	•	Ă	4	8
A * ?	•	•	•	•	•	•	7	1 7 1	8
Apru	•	•	•	•	•	•	8	5	
May	•	•	•	•	•	•	-	,	13
une	•	•	•	•	•	• 1	10	4 5	14
July	•	•	•	•	•	• 1	5	5	10
August .	•		•				6	3	9
September .	•		•	•	•		5	7	12
Totals .	. •	•	•				63	43	106

¹ This table, in accordance with its caption, includes the number of admissions, which is larger by two than the number (104) of persons admitted, two persons having been admitted twice each. Several of the succeeding tables represent the persons admitted.

TABLE No. 2. Discharges, 1878-79.

			Direct.			ED BY	BOARD RITIES.	TOTALS.		
MONTHS.		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
October, 1878 November . December . January, 1879 February . March . April . May . June . July . August . September		8 2 4 2 2 1 4 8 8 7 9 6	1 4 1 1 1 2 8 6 3 2 4 3	4 6 5 3 3 12 14 6 9 13	2 1	1 1 1	- 2 2 1 1 1 - 1 1	3 2 6 2 2 1 4 9 3 7 9	1 1 1 2 3 8 6 3 2 4	4 6 7 3 4 12 15 6 9 13
Totals	•	51	36	87	3	3	6	54	39	93

TABLE No. 3.

Daily Average Number of Patients in the Hospital, 1878-79.

		MO	NTHS.				Males.	Females.	Total.
October, 1	878		•	•	•		216.16	214.87	431.03
November		•	•		•	.	219.13	213.20	432.33
December			•				218.32	213.29	431.61
January, 1	879						214.35	215.48	429.83
February					•	.	217.11	218.53	435.64
March							220.00	220.71	440.71
April						.	222.63	218.03	440.66
May .						.	222.45	211.93	434.38
June.						.	225.57	212.96	438 53
July .						.	229.03	215.06	444.09
August						.	225.09	214.45	439.54
September	r						225.73	216 77	442.50
Avera	ıge	for th	ie yea	r.			221.31	215.42	436.73

¹ These totals were obtained by a division of the sums of daily residence, for the year, by 365, the number of days in the year.

TABLE No. 4.
Relation to Hospitals of the Persons admitted, 1878-79.

	Males.	Females.	Total.
Never before in any hospital	43	32	75
Former inmates of this hospital	11	7	18
of other hospitals in this State	2	1	3
of hospitals in other States,	3	1	4
of this hospital, and of other hospitals in this State .	_	_	_
of this hospital, and of hospitals in other States .	2	1	8
of other hospitals in this State, and of hospitals in other States	1	_	1
of this hospital, of other hospitals in this State, and of hospitals in other			
States			
Total of persons	62	42	104

TABLE No. 5.

Residence of the Patients admitted, 1878-79.

		COI	Males.	Females.	Total.				
Hampshire			•		•		12	9	21
Hampden							80	15	45
Franklin							6	5	11
Berkshire		•					18	12	25
Worcester				•			1	1	2
Total o	of pe	rsons					62	42	104

TABLE No. 6.

Nativity of the Patients admitted, 1878-79.

	N.	ATI VIT	Y.			Males.	Females.	Total.
Maine		•				2	1	8
New Hampshire			•			1	1	2
Vermont .			•			8	2	5
Massachusetts						29	12	41
Connecticut	•					4	5	8
New York .				•		5	8	8
Pennsylvania	•			•		1	-	1
Wisconsin .	•	•				1	-	1
Total of Un	ited	State	es .			46	24	70
Canada .						2	1	8
England .	•					3	1	4
Ireland .				•		6	12	18
Wales						2	_	2
Belgium .				•		1	_	1
Germany .				•		2	2	4
Austria .			•	•		_	1	1
Prince Edward's	Isl	and	•	•		-	1	1
Total of for	eigr	ners				16	18	84
United Stat	es		•			46	24	70
Persons		•				62	42	104

TABLE No. 7.

By what Authorities committed, 1878-79.

	AUTHO	Males.	Females.	Total.					
Friends .	•			•	•		2	3	5
Overseers of the	Poor						1	5	6
Superior Court				•	•		8	-	3
Probate Court			•	•		.	40	26	66
District Court				•	•		7	5	12
Police Court				•	•		7	8	10
Returned from e	lopen	nent					2	-	2
Total .							62	42	104

TABLE No. 8.

Ages of the Patients admitted, 1878-79.

A (ES.					Males.	Females.	Total.
Fifteen years and und	er	•				1	-	1
From 15 to 20 years	•			•		6	5	11
20 to 25 years		•	•	•		9	· 4	13
25 to 30 years		•		•		10	2	12
80 to 35 years	•	•	•	•		7 :	G	13
85 to 40 years	•	•				9	8	17
40 to 50 years	•		•			6	9	15
50 to 60 years		•	•		•	4	5	9
60 to 70 years		•	•	•		7	1	8
70 to 80 years		•				8	2	5
Total of persons	•	•	•	•	•	62	42	104

TABLE No. 9.

Relation to Marriage of the Patients admitted, 1878-79.

		cox	Males.	Females.	Total.					
Married		•		•	•	•		20	24	44
Single .		•		•	•	•	•	86	11	47
Widowers				•				5	-	5
Widows					•	•	•	_	7	7
Divorced			•		•		•	1	_	1
Total	of p	ersons			•			62	42	104

TABLE No. 10.

Occupations of the Men admitted, 1878-79.

Laborers					21	Shoemaker 1
Farmers	•		•		14	Axe-maker 1
Book-keepers			•		2	Carpenter 1
Clerks .	•				2	Cabinet-maker 1
Printers.	•		•		1	Tailor 1
Operatives	•		•		2	Liquor dealer 1
Weavers	•	•	•	•	1	Baggage-master 1
Designer in cl	oth-r	nill	•		1	Teamster 1
Manufacturer		•	•	•	1	Peddler 1
Druggist	•		•		1	Student 1
Paper-maker	•		•		1	None 8
Machinist	•		•		1	Total of persons 62
Blacksmith	•		•	•	1	

TABLE No. 11.

Alleged Causes of Insanity of the Patients admitted, 1878-79.

CAU	8 E 8.					Males.	Females.	Total
Mer	rtal.						'	
Domestic trouble.		•	•			1	4	5
Trouble		•	•		•	1	8	4
Disappointment .	•	•	•	•		1	1	2
Pecuniary troubles	•	•	• '	•		-	1	1
Religious excitement	•	•	•	•	•	-	1	1
Fright	•	•	•	•		1	-	1
Total of mental			•			4	10	14
Phys	nical.							
Ill health	•	•	•	•		8	18	16
Intemperance .	•	•	•		•	9	-	9
Overwork	•		•	•		7	2	9
Masturbation .	•	•	•	•	•	6	-	6
Inju ry		•	•	•		4	-	4
Epile psy	•	•	•	•		2	1	8
Puerperal	•	•		•		-	2	2
Change of life .			•	•	•	-	2	2
" Hardening of the br	ain '	".	•	•	•	_	1	1
Old age			•			1	_	1
Typhoid-fever .	•		•	•	•	1	-	1
Sun-stroke			•	•	•	1	-	1
"Paresis".			•	•		1	-	1
Congenital	•	•	•	•	•	_	1	1
Total of physical	•	•	•	•	•	35	22	57
Total of mental	•	•	•		•	4	10	14
Unknown .		•	•			23	10	33
Total of persons						62	42	104

¹ These causes are alleged, not by medical officers of the hospital, but by the friends of the patients, or in the commitment papers.

TABLE No. 12.

Duration of Disease before Admission, 1878-79.

DUR	ATI	ON.				Males.	Females.	Total.
Congenital		•		•		-	1	1
Under 1 month .		•		•	•	15	11	26
From 1 to 3 months					•	5	4	9
3 to 6 months		• .	•	•		8	8	11
6 to 12 months		•				4	6	10
1 to 2 years		•		•		10	2	12
2 to 5 years		•			•	8	5	8
5 to 10 years		•		•		5	4	9
10 to 20 years		•				8	_	8
Over 20 years .						1	_	1
Unknown		•		•		8	6	14
Total of persons	•	•	•	•	•	62	42	104

TABLE No. 18.

Age at First Attack of Insanity, 1878-79.

A	GES.					Males.	Females.	Total
Fifteen years and und	ler		• .			1	8	4
From 15 to 20 years			•			7	6	13
20 to 25 years				•		12	2	14
25 to 80 years					. •	8	4	12
80 to 35 years						6	6	12
85 to 40 years		•			. !	8	6	9
40 to 50 years		•				5	6	11
50 to 60 years		•				6	2	8
60 to 70 years	•	•				8	_	8
70 to 80 years		•	•	•		1	2	8
Unknown	•	•		•	•	10	5	15
Total of persons						62	42	104
					-			-

Digitized by GOOGLE

TABLE No. 14.

Status of the Patients admitted, 1878-79.

HOW SUPPORTED.				Males.	Females,	Total.
As first admitted.			j			
Supported by State	_	_	_	16	12	28
by towns and cities				32	25	57
by individuals .	•	•		14	5	19
Total of persons		•		62	42	104
Of the same patients as at pres discharged.	sent,	or wh	en			
Supported by State			.	14	13	27
			.	35	24	59
by individuals .	•	•		13	5	18
Total of persons				62	42	104

TABLE No. 15.

Deaths, 1878-79.

	CAUSE	es of	DEATI	I.			Males.	Females.	Total.
•	Nerv	ous S	ystem.	,					
Epilepsy .		•	•	•	•		8	- 1	8
Exhaustion of			ia.				2	1	8
Congestion of	the b	rain	•				2 1 1	- 1	1
Serous apople:		•	•		•	•	1	-	1
	Re	spirate	o ru .						
Phthisis	_	• .		1	2	8
Pueumonia.	•	•	•	•	•	•	_	5	š
Congestion of	the l		•	•	•	•	_	2 2 1	2 1
Congestion of	mie it	ango	•	•	•		_		•
	L)ig es ti	ve.						
Disease of the	liver	٠.	•	•			1	- !	1
Cancer of the	stoms	ch	•	•	•	•	_	1	1
	(Genero	ıl.						
Marasmus .				_	_		8	1	4
Old age .	•	•	•	•	•	•	2	1 1	8
Old age .	•	•	•	•	•	•			
Total .		•					14	9	23
			•		<u>.</u>				

TABLE No. 16.

Number and Status of Patients at the Close of each Week in the Year, 1878-79.

DA	TE.	State.	Town.	Private.	Total.	DAT	E.	State.	Town.	Private.	Total
18	78.					187	9.				
Oct.	5,	198	181	51	430	April	5,	200	186	55	441
	12,	198	181	51	430	! !	12,	200	187	50	443
	19,	198	182	52	432		19,	198	185	58	441
	26,	198	182	52	432		26,	198	183	57	438
Nov.	2,	199	181	5 2	432	May	3,	199	183	54	436
	9,	199	182	52	433		10,	200	180	54	431
	16,	199	181	52	432		17,	200	181	54	435
	23,	199	182	52	433		24,	201	181	53	435
	3 0,	199	180	53	432		31,	201	182	52	435
Dec.	7,	199	179	54	432	June	7,	203	182	52	437
	14,	201	179	54	434		14,	202	181	55	438
	21,	199	179	53	431		21,	202	181	5 <i>5</i>	438
	28,	198	178	53	429		28,	205	183	56	444
18	79.					July	5,	203	185	57	445
Jan.	4,	199	178	52	429		12,	203	186	57	446
	11,	199	179	52	430		19,	203	183	57	443
	18,	199	179	52	430		26,	208	188	57	447
	25,	199	178	53	430	Aug.	2,	203	182	57	442
Feb.	1,	200	180	53	433		9,	202	183	56	441
	8,	201	181	53	435		16,	200	183	56	439
	15,	200	183	53	436		23,	200	183	55	438
	2 2,	200	183	54	437		3 0,	201	184	55	440
Marcl	1,	199	184	54	437	Sept.	6,	200	185	56	441
	8,	201	183	54	440		13,	202	186	56	444
	15,	202	185	5 1	441		20,	202	185	57	444
	22,	202	185	56	443		27,	202	184	56	442
	29,	200	185	56	441						

WEEKLY AVERAGE.

State patients		•		200.34
Town patients				182 29
Private patients				54.23
Tatal				49: 00

TABLE No. 17.

Classed Average of Patients.

OFF1C	IAL	YEAR.		State Patients.	Town Patients.	Private Patients.	Total.
Month	ly A	verag	<u>.</u>				
1864-65		•	•	225.10	48.16	69.83	343.25
1865-66	•	•	•	252.16	50.58	75.58	378.33
Weekl	y A	verage	: .				
1866-67				261.96	49.46	89.75	401.17
1867-68		•		262.65	47.92	103.06	413.63
1868-69				248.52	54.98	101.46	404.96
1869-70				236.19	65.04	107.23	408.46
1870-71				234.10	77.07	118.38	429.55
1871-72				226.96	89.57	112.27	428 80
1872-73				248.02	99.23	90.00	437.25
1873-74				284.48	102.88	82.06	469.42
1874-75				274.35	128.34	72 46	475.15
1875-76				259.19	146 02	68.94	474.15
1876-77				254.84	161.58	60.02	476.44
1877-78				211.90	175 71	54.75	442.36
1878-79				200.34	182.29	54.23	436.86

TABLE No. 18.

Monthly Consumption of Gas.

			MON	TH8.					Cubic Feet.	Daily Average
			18	78.		-				
October									32,950	1062 90
November									42,250	1408.33
December	•	•	•	•		•		•	50,200	1619.35
			18	79.						i
January									44,350	1430.64
February									34,050	1216.07
March									28,500	919.35
April .									20,100	670 00
May .									14,050	453 22
June .									11,500	383.33
July .							•		11,600	374.19
August									14,750	475.80
September	•	•	•	•	•	•	•	•	20,850	678.33
									325,150	890.82

¹ Daily average for the year.

TABLE No. 19.

Annual Cost of Gas.

	Y	EAR.				Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860-61.	•					\$ 2,030 39	314.26	\$ 6 46
1861-62.					•	2,085 29	313.80	6 64
1862-63.	•			•		2,109 02	855.63	5 93
1863-64.	•		•	•	•	2,069 79	357.63	5 78
1864-65.	•		•	•	•	1,653 05	31240	4 82
1865-66 .	•				•	1,107 98	876.85	2 94
1866-67.						1,056 16	401.03	2 63
1867-68.	•					1,022 51	413.41	2 47
1868-69.	•	•		•		903 92	405.10	2 23
1869-70.				•		915 80	408.83	2 23
1870-71.				•		1,043 99	421.90	2 47
1871-72.						980 91	428.72	2 28
1872-73.						1,006 61	437.23	2 80
1873-74.		•				1,066 74	469.54	2 27
1874-75.						1,012 63	475.85	2 13
1875–76 .						1,089 82	474 21	2 20
1876-77 .		•				1,033 59	476.16	2 17
1877-78.						1,066 02	412.43	2 41
1878-79.	•	•			•	1,033 05	430.73	2 37

The Hospital has always been supplied with gas by the Northampton Gas-Light Company. Until within the last year the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since April 1, 1879, it has been but \$3.00, including meter-rent.

TABLE NO. 20.
Supplies for the Sereral Departments for the Year 1878-75

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ı	Tumblers.	8	21	1	1	ı	J	ı	ı	1	9
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Supplies for the Severat Departments for the Lear 1818-19.	- Jean fil	10	10	≘	တ	10	ı	1	4	-	1
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ies /	Bed-ticks.	4	7	9	10	ľ	<u>ස</u>	ÇI	_	4	1
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2d Hall	3d Hall	4th Hall	Middle 1st Hall	2d Hall	8d Hall	4th Hall	Lower 1st IIall	2d Hall	8d Hall	4th Hall	Kitchen.	Rear	Centre	Aggregate

TABLE No. 20 - Continued.

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Papers Pins.	1		1	1	1	1	_ 1		1	<u> </u>
Papers Needles.	1	1	ı	1	ı	ı		1	ı	1
Skeins Linen Thread.	4	G	G	0	6	6	G	0	a	1
Spools Thread.	1	1	ı	1	1	i	1	ı	1	i
Shoe-brushes.	-	-	-	-	C)	1	-	က	_	1
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l}rooms.	10	21	17	15	90	9	13	12	17	တ
Soap, pounds.	20	46	48	30	45	54	57	52	20	20
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Rollers.	ı	13	ı	9	9	1	4	13	9	ı
Dialy-towels.	9	18	ដ	113	ī	9	15	15	16	
.snooq8 nor1	ı	15	18	9	56	9	9	18	18	ı
Tin Cups.	ı	ı	27	ı	1	1	1	1	ı	1
Tin Plates,	1	1	1	ı	ឡ	1	1	4	œ	1
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Custers,	1	4	1	1	1	,	1	ı	_1	1
Spoons.	ဗ	ı	1	ı	ı	1	ı	ı	1	- 1
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	Men's Department. 1st Hull		3d and 4th Halls.	rall .	all .	3d and 4th Halls	[la]] .	Ila	3d and 4th Halls	Women's Department.
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2d Hall	3d Hall	4th Hall	Middle 1st Hall	2d Hall	1 Irall	4th Hall	Lower 1st Hall	2d Hall	8d Hall	4th Hall	Kitchen	Rear	Centre	Aggregate

TABLE No. 21.

Trustees of the Northampton Lunatic Hospital.

NAME.	Residence.	When app'ted.	Service ended.	From what Cause.
Charles E. Forbes .	Northampton .	1856	1857	Term expired.
Lucien C. Boynton .	Uxbridge	1856	1858	do. do.
Eliphalet Trask .	Springfield	1856	1875	do. do.
John C. Russell .	Great Barrington.	1856	1859	Resigned.
Horace Lyman	Greenfield	1856	1857	Removed.
Charles Smith	Northampton .	1857	1860	Resigned.
Luther V. Bell	Somerville	1857	1859	do.
Zebina L. Raymond .	Greenfield	1858	1859	do.
Franklin Ripley .	Greenfield	1859	1860	Died in office.
Edward Dickinson .	Amherst	1859	1864	Resigned.
Walter Laflin	Pittsfield	1859	1800	Term expired.
Silas M. Smith .	Northampton .	1860	1863	do. do.
Charles Allen	Greenfield	1800	1861	Resigned.
Alfred R. Field .	Greenfield	1861	1864	do.
Edward Hitchcock .	Amherst	1863	1879	do.
Silas M. Smith .	Northampton .	1864	-	Still in office.
Edmund II. Sawyer.	Easthampton .	1861	-	do. do.
Henry L. Sabin .	Williamstown .	1866	1876	Term expired.
Adams C. Deane .	Greenfield	1875	-	Still in office.
Henry W. Taft .	Pittsfield	1876	-	do. do.
William M. Gaylord.	Northampton .	1879	-	do. do.

TABLE No. 22.

Number of Persons other than Officers employed in the Regular Duties of the Hampital.

	occui	PATIO	NS.				Males.	Females.	Total.
Supervisors .		٠.		•		•	1	1	2
Assistant Super	visors				•		-	1	1
Assistant Clerk			•	•	•		-	1	1
Seamstress .							-	1	1
Assistant Seams	stress				•		-	1	1
Laundress .	•			•	•		-	1	· 1
Assistant Laune	dre s s			•			_	1	1
Baker	•						1	-	1
Assistant Baker				•	•		1	_	1
Steward .					•		1	-	1.
General Attend	ants			•	•		11	15	26
Housework, cen	tre bu	ildi	ng	•	•		-	2	2
Cook		•					-	1	1
Assistant Cooks					•		1	8	· 4
Rear Dining-roo	m	•		•	•			1	1
Watchman .				•	•		1	-	1
Carpenters .		•	•	•	•		3	_	8
Painter .			•	•	•		1	-	1
Assistant Engir	ieer	•		•			1	-	1
Night Engineer	•	•	•				1	-	1
Hostler .					•	•	1	-	1
Paver and Law	n-dres	ser					1	<u> </u>	1
Farmers .	•	•	•			•	7	-	7
Total .	• .	•	•	•	•	•	32	29	61

TABLE No. 23.

Days' Work by Patients.

MONTHS.		FARM.	ARM. KITCHEN.			Sewing- Room.	LAUNDRY.			
MONTHS.		Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total	
1878.		767	93	208	301	191	12	273	285	
October .	•	101	93	208	901	191	12	213	200	
November	•	667	90	201	290	165	10	231	241	
December		605	93	207	300	180	11	248	259	
1879.			1					1		
January .		519	93	211	304	197	15	256	271	
February	•	297	84	183	267	167	11	224	235	
March .		409	93	208	301	171	11	296	307	
April .		430	90	208	298	154	16	253	269	
May .		658	93	217	310	176	19	276	295	
June .		711	90	200	290	140	21	286	307	
July .		769	93	211	304	162	23	339	362	
August .		714	93	226	319	160	21	297	318	
September		729	90	211	301	184	22	317	339	
Totals		7,275	1,095	2,491	3,586	2,047	192	3,296	3,488	

The total of days' work here recorded is 16,396. This is what was performed by the regular workers on the farm and in the three departments mentioned. No record was kept of the work on the ornamental grounds, at the stable, in the bakery, the boiler-room, and the carpenter's shop. A large amount of other work is done, both in the halls, and, at irregular times, out of them.

TABLE NO. 24.

List of Articles made in the Sewing-Room, 1878-79.

D					299	Sheets			A	169
Dresses .	•	•	•	•			•	•		
Chemises	•	•	•	•	154	Pillow-cases .	•	•		Į81
Skirts .	•		•	•	240	Mattress-ticks	•	•	. 1	186
Drawers				•	63	Feather-ticks.	•	•		8
Aprons .					156	Straw-ticks .	•		•	49
Sacques.					17	Pillow-ticks .				14
Night-dresses	ı				13	Bed-spreads .	•			4
Night-caps	•				8	Bed-spreads (he	emmed)	•		98
Waists .					10	Carpet-strips (h	emmed)).		51
Hats trimmed	i				42	Carpets, made	•			6
Shirts .					266	Clothes-bags .	•			10
Pantaloons					9	Curtains .	•			66
Suspenders (pairs))			205	Cushions .	•			2
Camisoles					83	Table-cloths .				18
Handkerchief	s (he	mme	d)		9	Ox-blankets .	•			8
Collars .		•			171	Holders	•	•	. 5	520
Towels .					414	Sundries .	•			15
Roller-towels					105	Articles repaire	d.		11,4	07
Napkins.					75	-				

TABLE No. 25. Upholstery done in 1878-79.

Hair Mattresses made, new materials в Hair Mattresses made, new ticks 26 Hair Pillows made, new materials 18 Husk Mattresses made, new materials 60 Husk Mattresses made, new ticks 64 Husk Mattresses made, new husks 19 Hair Mattresses re-made, hair re-picked . 16 Hair Pillows re-made, hair re-picked 25

The busks were sorted and split, the hair picked, and the mattresses filled and tied, by patients.

TABLE No 26.

Officers and Employés. — Time Employed, March 1, 1879.

NAME.		Years.	Months.	Days.
Pliny Earle, M.D., Superintendent .		14	7	26
Edward B. Nims, M.D., 1st Assistant Phy	ysician .	10	2	14
Daniel Pickard, M.D., 2d Assistant Physic	cian .	1	10	22
Walter B. Welton, Clerk		18	_	14
Asa Wright, Farmer		21	3	-
Danford Morse, Engineer		14	_	7
Jeremiah E. Shufelt, Supervisor		14	10	4
Lucy A. Gilbert, Supervisor		12	l _ '	18
F. Josephus Rice, Steward		20	4	24
Mary Ward, Seamstress		8	6	3
Nell Russell, Laundress		1	່ 11	8
Charles Ziehlké, Baker		16	6	_
Frances C. Earle, Assistant Clerk		6	11	6
Sarah Bryant, Assistant Supervisor .		1	. 5	23
Minnie J. Howes, Assistant Laundress.		_	9	19
Perry Davis, Attendant		9 '	4	16
Robert H. Gallivan, Attendant		5	10	11
Thomas Powers, Attendant		4	11	11
James Neill, Attendant		3	11	6
James Ahearn, Attendant		8	10	_
Walter Pillinger, Attendant		4	9	29
Richard Neill, Attendant		2	! _	19
Samuel L. Bolter, Attendant		1	2	_
Michael Powers, Attendant		_	10	6
John C. Backum, Attendant		_	6	10
George C. Bolter, Attendant		_	. 3	8
Maria E. Graves, Attendant		11	1	7
Hannah Merrifield, Attendant		5	5	25
Martha R. Harris, Attendant		4	6	7
Jane McGuire, Attendant		3'	1	3
Ella Doolan, Attendant		3		27
Atlanta J. McPhee, Attendant	•	3	5	12
Nellie M. Henchy, Attendant	: :	3	2	2
Mary Ransom, Attendant		3	3	15
Victoria S. Shumway, Attendant		2	. 8	9
Cora Woodward, Attendant	• •	2	4	10
Cécile Riel, Attendant	• •	2	4	23
· · · · · · · · · · · · · · · · · · ·	• •	"	•	1

TABLE No. 26. — Continued.

names.			Years.	Months.	Days.
Ella V. Griswold, Attendant			1	8	10
Florence F. Rice, Attendant			1	5	18
Marion J. Guilfoil, Attendant			-	5	24
Julia B. Haskell, Cook			2	8	2
Emma Valcour, Assistant Cook			_	8	2
Eva Dowe, Assistant Cook			1	8	8
M. J. Lavery, Assistant Cook		•	1	7	1
Charles H. Lacore, Assistant Cook .			_	9	. 6
Harriet A. Powers, Centre			4	5	14
Lucy Valcour, Centre			_	-	8
Harriet Halliday, Farmers' Dining-room	ı.		4	7	11
William C. Hall, Assistant Engineer .			13	5	17
Nicholas Riel, Night Engineer			3	2	25
Andrew N. Thorington, Watchman .			8	1	80
Sifroi Belville, Carpenter			8	10	7
Waldy Tetro, Carpenter			5	11	23
Walter Tower, Carpenter			2	8	_
Alfred Parenteau, Painter			18	6	18
David Mercier, Hostler			2		14
Charles Egen, Assistant Baker			1	5	4
James Madden, Paver and Lawn-dresser	•		5	10	-
Benjamin Rockwell, Assistant Farmer	,		11	9	-
John Mercier, Assistant Farmer			11	8	_
Eugene Sullivan, Assistant Farmer	,		6	10	_
Elson E. Howes, Assistant Farmer	,		1	11	23
William Commier, Assistant Farmer	,		2	6	14
Julius Freeman, Assistant Farmer			1	7	24

Eleven of the persons have not been in their present situations during the whole period of service; for example, the supervisors, the assistant supervisor, and the seamstress, were formerly attendants.

Twelve of the persons have been employed more than once. In these instances the table gives the total time of service.

TWENTY-FIFTH ANNUAL REPORT

OF

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT NORTHAMPTON,

FOR THE YEAR ENDING SEPTEMBER 30, 1880.

BOSTON:

Rand, Avery, & Co., Printers to the Commonwealth, 117 Franklin Street. 1881.

OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

HENRY W. TAFT, Esq	•			PITTSFIELD.
LYMAN D. JAMES, Esq			•	WILLIAMSBURG
Hon. WILLIAM M. GAYLORD	٠.			NORTHAMPTON.
SILAS M. SMITH, Esq	•			NORTHAMPTON.
ADAMS C. DEANE, M.D				GREENFIELD.

RESIDENT OFFICERS.

PLINY EARLE, A.M.,	M.D.	•	•	•	SUPERINTENDENT.
EDWARD B. NIMS, M.	D	•		•	FIRST ASSISTANT PHYSICIAN.
DANIEL PICKARD, M.	.D	•	•	•	SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON	•	•	•		CLERK.
ASA WRIGHT	•	•		•	FARMER.
DANFORD MORSE .		. •		•	Engineer.

TREASURER.

PLINY EARLE	•	•	•	•	•	•	•	•	•	NORTHAMPTON.
		O	FFIC	E AT	THE	Новр	ITAL.			

SUBORDINATE OFFICERS.

JEREMIAH E. S.	HUFELT	•	•	•	•	•	•	MALE SUPERVISOR.
LUCY A. GILBEI	RT .		•					FEMALE SUPERVISOR.
F. JOSEPHUS RI	CE.			•	•	•		STEWARD.
MARY E. WARD				•	•			Seamstress.
NELL RUSSELL		•		•			•	LAUNDRESS.
CHARLES ZIEHI	ké.	•		•	•	•	•	Baker.

Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To his Excellency the Governor of the Commonwealth, and the Honorable Council.

THE Trustees of the Northampton Lunatic Hospital have the honor to present to you their Twenty-fifth Annual Report.

The object for which this institution was created being the custody, the care, and, if possible, the restoration from disease, of the persons legally committed to its charge, we first lay before you the statistics of the movement of the population of its patients, and the general results of treatment for the year.

The number of patients in the Hospital Sept. 30, 1879, was, of men 224, and of women 218: total, 442. The number received in the course of the official year is, of men 59, of women 58: total, 117. Hence the whole number under the care of the Hospital during at least some part of the year is, of men 283, of women 276: total, 559. The number who left the Hospital by discharge is, of men 43, of women 41, — a total of 84; and the number who died is 29, of whom 17 were men, and 12 women.

On the 30th of September, 1880, the number remaining in the Hospital was, of men 223, and of women 223, — a total of 446. The daily average number for the year, of patients resident in the Hospital, was a fraction more than 450. The largest number in the house on any day was 458, on the 23d of March, 1880; and the smallest number on any day was 442, on each of six days in the first half of September, 1880.

Of the 84 patients who left the Hospital, the mental condition, at the time of discharge, is recorded as recovered, for 28; much improved, for 11; improved, for 23; and unimproved, for 19.

When this Hospital was opened, its accommodations exceeded the requirements of the people of the four western counties of the State, for whose benefit it was especially in-Throughout the first nineteen years of its operatended. tions, the direct commitments to it were not sufficient to keep it full, and consequently patients were from time to time transferred to it from the other similar State institutions of Massachusetts. When the new Hospital at Worcester was opened, those transfers were stopped, and on the 30th of October, 1877, twenty-five of our patients were removed to the Asylum for Chronic Insane at Worcester. movals left 449 patients in this Hospital. A period of three years, less one month, has elapsed; and although the number now here is less by three than it was at that time, still, during a large part of the official year, the number has been over 450; and the daily average number for the whole year, as has just been stated, was 450 and a fraction. Hence it appears that the population of the four western counties of the State is now sufficient for the supply of all the patients that can be accommodated here.

In regard to future provision for the insane, the tendency of opinion appears to be toward the separation of the incurables from the curables, and placing them in buildings adjacent to, and dependent upon, existing hospitals, rather than in new and independent establishments. Under these circumstances, we have thought it a measure of prudent foresight to purchase a lot of between five and six acres of land adjoining the Samuel Parsons lot, on the south side of the county-road, opposite the main-entrance gate upon the Hospital premises. By this purchase we have secured an excellent and very beautiful site for any additional dwellings, whether large or small, which it may in the future be decided to erect in connection with this institution. no finer or more desirable spot for such edifices in the township of Northampton. The easterly part of the lot has been greatly improved, in the course of the summer, by a large amount of grading. Digitized by Google

A small wooden building in the rear of the north wing has been used, for many years, as an appendage to the kitchen, partly as a scullery, and partly as a store-room for the offal of the vegetables and of the dining-rooms, until it can be carried to the piggery. As this building had become much dilapidated, and as something of the kind appeared to be necessary, it was removed, in the early part of the official year, and replaced by a permanent and substantial brick edifice. By making it somewhat larger than the old one, room was obtained for the storage of several hundred bushels of charcoal.

A section of the main sewer, leading from the Hospital to the reservoirs in the meadow, having become defective, it was decided to make a new one, deviating from the line of the old one which, in two places, ran beneath the wall of the ox-yard. The old one was quadrangular in shape and made of stone, and its defects were a consequence of such construction. The new one is of brick, cylindrical, and of two feet calibre.

The current of Mill River, which bounds the farm upon the northern side, has for many years been carrying away the soil of the meadow, one of the best sections of the premises for agricultural purposes. As a permanent preventive of this encroachment, several hundred feet of the bank of the river was rip-rapped with large stones in the autumn of 1879. It is intended further to prosecute the work before the close of the current calendar year.

The baluster of the two winding staircases which extend from the first to the fourth floor, in the rotunda of the central building, has been surmounted by a wire screen, of diamond mesh, two and a half feet in height, for the greater security from accidents to the inmates.

Under the law of 1879, the price charged for the board of State and town patients was three dollars per week for the first six months of the official year; and, under the law of 1880, three dollars and twenty-five cents per week during the last six months. This, with our income from private patients and other sources, has been sufficient to meet the current expenses, to pay for such improvements as it has been thought expedient to make, and to increase, to some extent, our working capital.

We estimate the actual average cost, per patient, for the year just closed, to have been \$3.155 per week.

The charges for board, in the course of the official year, for each of the three classes of patients, together with their total, are as follows:—

For State patients .				\$ 33,172 58
town patients .	•			33,264 26
private patients	•			14,481 06
•				
Total .				\$ 80,917 90

In the report of the Treasurer will be found, as usual, a detail, under general and special heads, of both the receipts and the expenditures of money, accompanied by the certificate of the Auditors.

According to the balances of the accounts, it appears that on the 30th of September, 1880, — the end of the official year, — there were:—

Invested funds			\$ 10,000 00
Cash assets, available for future use	•	•	26,616 16
Total			\$ 36,616 16
And liabilities (bills payable)	•	•	5,397 12
Balance in favor of the Hospital			\$ 31,21 904

Besides these cash assets, there are purchased provisions and supplies on hand, the valuation of which is \$13,692.27, and all our winter's store of hay, grain, and vegetables raised upon the premises.

The staff of resident officers, both principal and subordinate, remains the same as at the beginning of the year.

The Board of Trustees has continued its customary method and frequency of inspection, and would, in closing their report, once more express their satisfaction with the management of the institution by its administrative officers.

> HENRY W. TAFT. LYMAN D. JAMES. WM. M. GAYLORD. SILAS M. SMITH. A. C. DEANE.

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

I HEREWITH present a general summary of the Hospital accounts, for the official year 1879-80, in the same form as heretofore adopted. All the receipts of money, together with their respective sources, and all the disbursements, with the general purposes for which they were made, are represented.

RECEIPTS.

Balance in hands of Tre	asur	er Se	ept. 3	0, 18	379, i	ncludi	ng		
United-States bond			-		•		•	\$14,116	28
Received for board and co	ntin	zencie	es of 1	privat	te pai	tients		14,960	53
Received for board and co		-	_		_			33,251	01
Received for board and co		_			•			32,495	35
Received for animals, prod					٠.			593	
Received for sundry accou								1,776	77
									_
Total	•	•	•	•	•	•		\$97,193	47
	Dı	SBUR	SEME:	NTS.					
For provisions and supplie	g	_		_		_		8 24,115	84
fuel			_		•	-		6,127	
gas and oil	·	_	·	·	•		•	1,036	
water	•	•	·	•		-	•	788	
salaries and wages	•	•	•	•	•	•	•	20,373	
medical supplies .	•	•	•	•	•	•	•	1,555	
furniture, beds, and b	644	nor.	•	•	•	•	•	2,992	
clothing and dry-good		mg.	•	•	•	•	•	4,208	
contingencies .	ο.	•	•	•	•	•	•	967	
farm	•	•	•	•	•	•	•	3,214	
farm-stock	•	•	•	•	•	•	•	1,083	
	•	•	•	•	•	•	•	•	
farm-wages	•	•	•	•	•	•	•	3,820	
real estate (land).		•	•	•	•	•	•	2,800	
improvements and rep		•	•	•	•	•	•	7,616	
miscellaneous expense		٠.	: .	. •	•		•	1,204	70
Balance in hands of Tre		er, 1	nclud	ıng	Unite	ed-Star	es	4 = 000	
bond, Sept. 30, 18	80	•	•	•	•	•	•	15,289	54 —
Total		.•	•		•	•		\$97,193	47

PLINY EARLE, Treasurer.

NORTHAMPTON, Oct. 7, 1880.

We have examined the accounts of the Treasurer of the Hospital, and find that every entry has a proper voucher.

A. C. DEANE, WM. M. GAYLORD,

NORTHAMPTON, Oct. 7, 1880.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

THE following table of general statistics shows the changes that have taken place in the resident patients of the Hospital in the course of the official year, together with the results of treatment. The formula differs, to some extent, from the similar one heretofore used in our reports. It is the first of the series of twenty-four tables recently adopted by the Board of Health, Lunacy, and Charity, and recommended for use in the Massachusetts hospitals and asylums for the insane:—

1. General Statistics, 1879-80.

•	Males.	Females.	Total.
Patients in Hospital Oct. 1, 1879	224	218	442
Admitted within the year '	59	58	117
Whole number of cases within the year .	283	276	559
Discharged within the year	43	41	84
Viz., as recovered	16	12	28
as much improved	5	7	12
as improved	11	12	23
as unimproved	9	10	19
as not insane	2	_	2
Deaths ·	17	12	29
Patients remaining Sept. 30, 1880	223	223	446
Viz, supported as State patients	95	89	184
as town patients	99	106	205
as private patients	29	28	57
Number of different persons within the year,	281	272	553
" " admitted	58	57	115
" " recovered	16	12	28
Daily average number of patients	227.28	223.23	450.51

As indicated by the table, the number of admissions was one hundred and seventeen. Each admission gave us, in

medical language, a patient, or a case. Consequently the number of patients, or cases, admitted was one hundred and seventeen. But among the persons admitted, there were two one man and one woman, who were admitted twice each in the course of the year. Each one of these persons, being admitted twice, counted as two patients, or cases. Hence the number of persons admitted was only one hundred and fifteen, being less by two than the number of patients or cases, admitted. This statement is made, in part, for the purpose of clearly illustrating the difference, in medical significance, between a person and a patient, or case, and is intended for the benefit of those who, in reading these reports, are not accustomed to make such a discrimination.

The number of persons admitted was larger by eleven than it was in the next foregoing year. The number remaining in the house at the close of the year is larger by four than it was on the 30th of September, 1879; and the daily average number for the year exceeds by thirteen that of the next preceding year. For these reasons it may fairly be inferred, that, notwithstanding the virtual essation of transfers from other institutions, the Hospital will not lack for patients in the future. The growth of population has given to the four western counties of the State the ability to keep the building not only full but crowded.

Of the one hundred and fifteen persons admitted, twenty—of whom nine were men and eleven women—have been in the Hospital more than once each. Thirteen have been received twice each,—six of them being men, and seven women. Four, or two of either sex, have been received three times each; two, or one of either sex, four times each; and one, a woman, twelve times.

Of the thirteen who have been admitted twice each, two men and three women—a total of five—were discharged as recovered, on their first admission; two men were discharged as much improved, one man and three women as improved, and one man and one woman as unimproved.

Of the four who have been admitted three times each, one of the men had been discharged recovered once, and improved once; the other as eloped once, and improved once. One of the women had been discharged recovered twice; and the other recovered once, and improved once.

Of the two who have been admitted four times each, the man had been discharged recovered three times, and the woman recovered twice, and improved once.

The woman who has been admitted twelve times had been discharged recovered eight times, and improved three times. The total number of former recoveries of eleven of the twenty re-admitted persons is twenty-two.

Two persons— one man and one woman— were discharged twice each within the year. Neither of them was reported as recovered on the first discharge.

STATUS OF PATIENTS.

Of the one hundred and seventeen patients admitted, the expenses here of thirty-three were charged, in the first instance, to the State; of sixty, to towns and cities; and of twenty-four, to individuals. Afterwards the expenses of three were transferred from the State to towns, and of one from a town to an individual.

The number, and consequently the relative proportion, of patients supported by cities and towns, continues to increase. One year ago there were but one hundred and eighty-four of that class; now there are two hundred and five. Eight years ago there were only ninety-two. The number has consequently more than doubled in that time.

Of the one hundred and thirteen patients discharged, including those who died, thirty-nine were beneficiaries of the State, and fifty-three of towns and cities. Twenty-one were private patients.

Of the four hundred and forty-six patients remaining in the house on the 30th of September, 1880, the cost of support of one hundred and eighty-four is charged to the State; of two hundred and five, to towns and cities; and of fifty-seven, to individuals.

The weekly average number of each of these classes, as deduced from our fifty-two Saturday returns to the Board of Health, Lunacy, and Charity, is as follows: of State patients, 197.03; town and city patients, 198.01; private patients, 55.46: total, 450.50.

RECOVERIES.

Of the eighty-four patients who left the Hospital in the course of the year, there were twenty-eight, sixteen of whom

were men, and twelve women, who, according to our standard of mental health, and our judgment in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncrasy, education, and habits, were properly recorded as recovered. No person recovered twice within the year, and consequently the number of persons and of patients who recovered was the same. Of these twenty-eight persons, thirteen men and eight women—a total of twenty-one—had never before been treated at this Hospital. The remaining seven were cases of re-admission. Two of the men had been previously admitted once each, one man and three women twice each, and one woman eleven times. In three of the persons the mental disorder might properly be called constitutional recurrent mania, and in three others it appeared to be a consequence of the excessive use of stimulants.

Of the seven persons who had previously been treated in the Hospital, the condition upon discharge upon those former admissions was as follows: one man recovered once; one man recovered once, and improved once; and one man much improved once; two women recovered twice each; one woman recovered eight times, and improved once; and one woman recovered eight times, and improved three times. The whole number of former recoveries in this Hospital, of six of the persons, is fifteen. The same six persons have now been discharged as recovered a total of twenty-one times. One of the six—a man—committed suicide by drowning about ten months after his discharge.

Prior to admission here, one of the men had been treated and discharged from the Worcester Lunatic Hospital once, and the Utica, N.Y., State Asylum three times.

Of the twenty-eight persons discharged as recovered, six were beneficiaries of the State, and fourteen of towns. The expenses of eight were defrayed by individuals. Three patients—a man and two women—who were discharged as much improved are now reported to us as fully recovered.

DEATHS.

For still another year the Hospital has been exempt, as it always has been, from any severe acute epidemic or endemic disease; and nearly all the mortality has been the final consequence of chronic maladies. The whole number of deaths is twenty-nine, of which seventeen were of men and twelve of women. Of the diseases terminating fatally, consumption, as is frequently the fact, takes the lead. It caused five deaths,—two of men and three of women. Next follow, with four deaths each, all of them of men, two very formidable diseases which almost never, in establishments for the insane, have any other than a fatal termination. Those diseases are epilepsy, and that singular combination of paralysis and insanity now generally known as paresis. Two men died of disease of the heart, and two of marasmus, and one man and one woman of pneumonia. The other ten deaths resulted from as many diferent diseases, or causes, all of which are stated in the appropriate table in the appendix.

The fact that in one instance the death is attributed to suicide may serve to introduce a few remarks upon that subject. In the seven successive annual reports next preceding this, we were exempted from the necessity of reporting the decease of any patient by self-destruction. There was a suicide on the 27th of January, 1872. From that time forward to the 5th of January, 1880, a period of only twenty-two days less than eight years, there was no death of which there could be even a suspicion that it was the result of the direct intent and action of the person who died. But on the date last mentioned, the death occurred of a woman who, a few days before, had climbed over the baluster of the stairs in the rotunda, and, after hanging a moment by her hands from the rail of the baluster, loosed her hold, and dropped to the floor two stories below. The shock was such that, after lingering nearly five days in a state of unconsciousness, she died. the table above mentioned, her decease is recorded as the consequence of an injury from a fall. The question is, Was self-destruction intended? The reader of this account will undoubtedly answer, "Yes." But they who best knew the woman as she was while in the Hospital answer, "Probably not." She had never manifested any propensity to suicide; but for several days before the fatal act she had been haunted by an active but vague apprehension that some one was about to injure her, - an undefined suspicion or sentiment of approaching evil. Those persons who doubt that she intended suicide believe that the act was performed upon the impulse of the moment to escape from the Hospital,

believing that by so doing she would avoid that imaginary evil.

On the 7th of August, 1880, a woman committed suicide by hanging. Assuming that, in both of these cases, life was terminated by suicide, the whole number of that class of deaths in the Hospital within the twenty-two years since it was opened is fourteen. Ten of them took place in the course of the first eleven years, and only four within the last eleven. But the average number of patients in the Hospital was larger by more than a hundred during the latter than during the former period.

Both the actual number and the relative proportion of deaths of men was very considerably larger than that of women. The mortality of men, as calculated upon the whole number of patients within the year, was 6.01 per cent; while that of women was but 4.35 per cent. According to these proportions, if, of a certain number of men admitted to a hospital, 601 of them should die while in the hospital, then, of the same number of admitted women, only 435 would die.

If the mortality be calculated upon the daily average number of patients, which is generally believed to be the most accurate method, the percentage of deaths was, of men 7.48, of women 5.38. In other words, according to this showing, if the number of men and of women in a hospital were always kept equal, then, within a period in which there would be 748 deaths of men, there would be but 538 deaths of women.

Nine of the persons who died were wards of the State, sixteen were supported by towns, and four were private patients.

The subjoined table shows the annual number and proportion of deaths during the whole period of the operations of he Hospital:—

Deaths and their Ratios from Sept. 30, 1858, to Oct. 1, 1880.

OFFICIAL	Whole	Daily Average No. of		DEATHS.		Per Cent on Whole No.	Per Cent on Daily Average	
YEAR.	No. of Patients.	Patients.	Men.	Women.	Total.	of Patients treated.	No. of Patients	
1858-59,	313	229.55	7	12	19	6.07	8.27	
1859-60.	398	255.96	9	18	27	6.78	10 54	
1860-61,	434	314.26	15	15	80	6.91	9.54	
1861-62,	442	313.80	9	10	19	4.29	6.05	
1862-63,	470	355 28	19	7	26	5 53	7.31	
1863-64,	475	357.63	17	30	47	9.89	13.14	
1864-65,	469	342.40	17	24	41	8.76	11.97	
1865-66,	488	876.35	18	13	31	6.35	8.23	
1866-67,	543	401.03	23	24	47	8.65	11.71	
1867-68,	565	413.41	25	18	43	7.61	10.40	
1868-69,	590	405.10	13	12	25	4.23	6.17	
1869-70,	604	408.83	22	11	33	5.46	8.07	
1870-71,	616	421 90 •	16	12	28	4.54	6.64	
1871-72,	619	428.72	19	18	37	5.97	8.63	
1872-73,	614	437.23	13	8	21	3.42	4.80	
1873-74,	626	469.54	14	11	25	3.99	5.32	
1874-75,	629	475.35	23	18	41	6.52	8.62	
1875-76,	629	474 21	18	19	37	5 88	7.80	
1876-77,	603	476.16	21	21	42	6.96	8 82	
1877-78,	551	442.43	14	9	23	4.17	5.19	
1878-79,	535	436.73	14	9	23	4 29	5.27	
1879-80,	559	450.51	17	12	29	5.19	6.44	

The mortality for the twenty-two years, calculated upon the number of patients annually treated, was 5.81 per cent. Calculated upon the annual daily average number of patients, it was 7.38 per cent.

The same relative proportions for the first half of the time, or eleven years, are, on the number of patients annually treated, 6.84 per cent, and on the daily average number, 9.43 per cent.

During the last half of the time the proportions were, on the whole number of patients annually treated, 5.15 per cent, and on the daily average number, 6.68 per cent.

The mortality of the year just closed was much less than the average of the first eleven years, materially less than the average of the whole period, and but a very small fraction more than the average of the last eleven years.

No other three consecutive years in the history of the Hospital had so low a rate of mortality as the last three.

The number of deaths annually reported by a public institution for the insane is not a positive indication of the actual mortality among the persons who have been under treatment at that institution, in each year, respectively. Some enfeebled or sickly patients, who appear to be nearly approaching the end of life, and whose mental condition is such that the restraints of a hospital are no longer necessary, are removed therefrom, for the express purpose that they may die in the bosom of the family, or among their former friends. This probably occurs much more frequently in the corporate institutions, where, as a rule, but few if any paupers are received, than in the State hospitals or asylums, in which, as a rule, a majority, and often a very large majority, of the patients derive their support from the public treasury. Many of these persons have no homes, and the homes of many others are not such as to make the siek or the dying so comfortable as they are in the hospital.

The late Dr. Luther V. Bell, in a conversation upon the statistics of insanity, remarked that, were he so disposed, he could reduce the mortality at the McLean Asylum so low as to almost prevent the necessity of any table, or any column in a table, for deaths. His patients were all, or nearly all, supported by private funds; they were mostly from wealthy families; and the homes of much the larger part of them were within a comparatively short distance from the asylum. No long journey was required for the patient to reach his home; and all the comforts and the proper attentions of the sick-room could be provided for him when there. Almost invariably, even if not doing it from choice, the friends, if so advised, would remove their invalidate relative before the very near approach of death should render removal improper.

The extent to which such removals take place, and the consequent extent of the effect upon the tables of mortality, undoubtedly differ in different institutions. Within the last official year there has been one, and only one, removal of the kind from this Hospital. The patient was a woman, and she was taken away by her relatives at their own option. For many years I have made it a rule of action not to recommend or advise removal under the circumstances indicated. The action of the friends is left wholly to their own judgment.

But if, by this removal of dying patients, the apparent mortality at the institutions is made less than the real mor-

tality among their patients, there is, to a greater or less extent, a compensatory increase of the number of deaths by the admission of persons in the very last stages of existence. It is very questionable whether these institutions were intended for octogenarians, tottering with the debility of advanced age, even though they have some of the vagaries of senile imbecility; or for frail and feeble invalids, who, upon arrival, must be carried like infants from the carriage to the bed; or for people, whatever be their age, whose constitutions are so shattered as to present to the eye of a physician no reasonable prospect of a three-months' prolongation of life. And yet patients of these descriptions are more or less constantly sent to all such public institutions as have no power of selection of the persons whom they will receive, but are obliged to take all who are legally brought to them.

It is not long since a person belonging to the last of the three mentioned classes was brought by an officer of one of the towns to this Hospital. After a very cursory examination of the patient, I remarked to the officer, "You have brought him here to die, I suppose."—"Yes," said he; and his answer bespoke the candid man. And the patient did die in just twenty-six days after admission. Another person of the same class, brought at a more recent date, was fortunate in having a longer lease of life. He lived two months and twelve days after his arrival.

WORSHIP AND ENTERTAINMENT.

In the course of the past year, those patients whose condition is such as to permit the practice have been collected no less than three hundred and thirty-four times, for purposes either of worship, or of instructive or amusing entertainment. As heretofore, religious services have been held in the chapel upon the afternoon of every sabbath. The gatherings for all other exercises were upon the evenings of secular days. It is distinctly understood,—and to this end the patients are frequently reminded of the fact,—that these last-mentioned assemblies, although nearly all of them are both opened and closed by the reading and singing of a hymn, and although the only other exercise at some of them consists of reading from the Bible, are not professedly diverteligious character. The exercises are considerably diver-

sified, not only for the purpose of ministering to different tastes, but also for the sake of variety; and each hearer is left to derive such benefit from them as he may. It is possible that the exercise which simply engages the intellect of one person may appeal to the moral sentiments of another: and, whatever the character of the effect upon the mind, whether it be of the higher nature of devotion, or whether it be of simple instruction, or of entertainment, or of mere amusement, still some benefit is gained.

The organization of the Hospital does not include the office of chaplain, and no one person is regularly employed in the performance of the duties attached to such office. The religious services are conducted in rotation by the pastors of several churches of different denominations.

The nature and frequency of the exercises for the past year may be learned from the following records:—

1.		ses on the S Divine worshi		ватн.						52	days.
2.		ses on Secul	•	Even	INGS	3.					•
	(a)	Readings, oper	ing	and c	losin	g with	sacr	ed mu	sic :		
		The Bible		•		•	•			28	days.
		The Bible, an	d se	lection	ıs of	prose			•	11	4.6
	•	The Bible, an	d se	lection	ıs of	poeta	·y			35	66
		Miscellaneous	sele	ections	of j	prose	•			52	
		Miscellaneous	sele	ections	of	poetry	•			67	46
		Miscellaneous	sele	ctions	of j	prose i	and j	poetry	7.	51	**
	(b)	Lectures, open	ing (and clo	sing	with s	acre	d mus	ic :		
		On reading								2	44
		Death of Will	iam	IV.,	and	ascens	sion	of Vic	etoria	1	44
		Funeral of W	illia	m IV.						1	**
	•	Coronation of	Vic	toria	•	•			•	1	46
	(c)	Other entertain	men	ts : —							
	• •	Pictures show	n w	ith the	ste	reopti	con			6	4.
		Concerts of vo	cal	and in	istru	ımenta	al m	usic		5	• •
		Recitations		•		•				6	**
	(d)	Social gatherin	gs:								
		Quadrille part	ies							16	64
		No assembly		•		•		•	•	32	4.
		Total			٠.				•	366	days.

As will be seen, there were but thirty-two days within the year upon which there was no assemblage of the inmates

Among these were the days of the monthly meetings of the Trustees, and those upon which the Hospital was visited by the several State authorities legally authorized to inspect it.

Dr. Meekins, as for many years heretofore, exhibited the stereoptic pictures; and Mrs. Smith and Miss Longley assisted each at one concert.

FARM.

The somewhat protracted and severe drought in the beginning of the summer months had its necessarily unfavorable effect upon the products of earliest growth. This effect was the most apparent upon the first planting of potatoes, of which we had several acres. From these hardly half of the usual crop was obtained, and even those were both small and of inferior quality. Next to potatoes, in suffering from the deprivation of water, was grass; and the crop of hay, although not small, was considerably less than was expected from the promise of the spring. A larger quantity than in any former year was produced upon lands owned by the hospital; but the extent of those lands has been increased within the last few years.

Of kitchen vegetables for midsummer consumption,—beets, beans, onions, squashes, tomatoes, cucumbers, and sweet-corn,—there was an abundance which amounted to profusion.

The product of apples, though very large, was not quite equal to that of 1878. It probably would have been as great, had not the drought caused them to drop, in the earlier stages of growth, to a much larger extent than usual. The same agency, perhaps, together with the periods of unwonted heat in the course of the season, brought them to an early maturity, so that from about the 20th of July we were enabled to distribute them freely to the patients. From that time to the close of September, about two hundred barrels of them have been consumed in the house.

SCHEDULE OF PRODUCTS.

Hay (first growth of home farm), 921 tons, at \$16.			\$1,480 00
Hay (second growth, home farm), 29 1/3 tons, at \$16	•	•	469 33
Hay (first growth, south lot), 19 tons, at \$16.	•		309 33
Hay (second growth, south lot), 33 tons, at \$16 .	•	•	58 66
Amount carried forward		•	\$2,317 82

Amount brought forward .						 \$ 2,317	32
Hay (first growth, Clarke orch:	ard)	93 t	ons,	at \$ 16	3	 154	66
Corn-fodder, 10 tons					•	 45	00
Oat-straw, 9 tons						 90	00
Corn, 350 bushels						 175	00
Oats, 350 bushels					•	 157	50
Broom-seed, 125 bushels .		•				 31	25
Potatoes, 3,000 bushels						 1,500	00
Carrots, 200 bushels						 60	00
Beets, 1,387 bushels						 416	10
Onions, 282 bushels		•		•		 141	00
Turnips, 500 bushels						 150	00
Parsnips, 25 bushels						 . 12	50
Beans, Lima, in shell, 150 bush						 180	25
Beans, string, 311 bushels .						 . 31	50
Beans, Lima, dry, 20 bushels.						 60	00
Beans, common, dry, 5 bushels						 . 7	50
Pease, green, in pod, 112 bushe						 150	08
Sweet-corn, green, in ear, 330		els				 330	00
Tomatoes, 93 bushels						 93	00
Lettuce, 102 bushels						 51	25
Cucumbers, 1781 bushels .						 100	
Squashes, summer, 1191 bushe	ls .	,				 153	00
Squashes, winter, 10 tons .		•				 300	00
Melons, 6,000 pounds						 64	37
Asparagus, 39½ bushels						 79	00
Pie-plant, 301 bushels						 22	88
Beet-greens, 271 bushels						 27	5 0
Cabbages, 5,000 heads						 200	00
Currants, red, 161 bushels .						 66	00
Currants, black, } bushel .				•		 . 2	00
Apples, 950 barrels						 950	00
Pears, 32 bushels						 . 11	25
Grapes, 3 bushels						 3	00
Quinces, 6 bushels		•				 . 9	00
Veal, raised here, 299 pounds.		•				 40	79
Pork, 14,729 pounds						 972	37
Pigs, sold, 118						 265	15
Turkeys, 118 pounds						 . 26	65
Chickens, 40 pounds						 . 6	80
Heads and plucks		•				 21	25
Eggs, 277 dozens						 60	
Milk, grass-fed, 22,451 quarts						 1,122	
Cider, 50 barrels					•	 m=	
Broom-brush				•		0=	00
Calf-skins, 3							75
Young calves, sold, 26						. 81	
Wood, sold		•				99	55
· · · · · · · · · · · · · · · · · · ·							

The quantity of products is larger than ever before, although, in consequence of higher prices, the value of them has been slightly exceeded in two foregoing years.

It is proper to state, as it usually has been stated in the annual reports, that only one-quarter of the milk actually produced on the farm is placed in this list. The whole quantity for the past year was 22,451 gallons, which is more than in any former year; but it is estimated that three-fourths of it was the products of the hay, grain, and other vegetable growths mentioned and appraised in the table.

Of thirty swine raised and fattened on the farm, and slaughtered in the course of the winter, the dressed weight was respectively as follows: 519, 492, 462, 416, 492, 464, 455, 400, 513, 515, 500, 540, 474, 420, 500, 401, 500, 460, 798, 500, 366, 417, 578, 500, 494, 402, 547, 504, 474, 624. The aggregate weight is 14,727 pounds; the average weight, 490 pounds; the average weight of the largest ten, 563 pounds; and that of the largest five, 617 pounds. The heaviest one, weighing 798 pounds, rarely finds a competitor in this latitude.

The farm is now stocked with 8 horses, 8 oxen, 1 bull, 30 cows, 35 fattening hogs, 3 boars, 14 breeding sows, 20 shotes, 50 small pigs, and about the usual quantity of poultry.

HOW THE HOSPITAL IS SUPPORTED.

Although a State institution, this Hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the burial-expenses of State patients who die in the hospital. The receipts from the lastmentioned source during the past year were ninety dollars.

For the entire support of State patients, including clothing and all loss from breakage and other kinds of destruction, the Hospital received three dollars and fifty cents each per week from the treasury of the Commonwealth from April 1, 1870, to April 1, 1879. For one year after the latter date it received but three dollars each per week; and since April 1, 1880, it has received three dollars and twenty-five cents each per week. This is the compensation fixed by statute-law. More than two-fifths of the inmates belong to this class. During the past year the weekly average of them was 43.7 per cent of the whole.

For town patients it has received, and now receives, from the treasuries of the towns respectively in which those patients have legal settlements, the same sum per week as from the State treasury for State patients; but the towns clothe their patients, and remunerate the Hospital for damages done by them. Of town patients, the weekly average for the year was 43.9 per cent, or a little more than that of State patients.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1880, was \$5.122 each per week. Clothing and damages are extra charges. The weekly average of these patients during the past year was 12.3 per cent, or about one-eighth of the whole.

The average weekly pay per capita, received by the Hospital for all its patients, State, town, and private, in the course of the year, is \$3.454. Such are the pecuniary resources of the Hospital. We turn to the results of

THE FINANCE OF THE LAST FIFTEEN YEARS.

In April, 1865, the Hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its favor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of five thousand dollars, in two appropriations, for specific purposes,—one of two thousand, and the other of three thousand dollars.

As an offset to the five thousand dollars bonus, the Hospital has purchased and paid for several lots of land, amounting to about one hundred and forty-nine acres, the total cost of which was \$25,590. The State then has, in this way alone, been overpaid for its bonus in the sum of \$20,590.

The amount paid by the Hospital for repairs and improvements in the course of the fifteen years, from Sept. 30, 1865, to Sept. 30, 1880, is \$179,398.44.

The surplus of cash assets now on hand, including United-States bond, is \$31,219.04, or \$30,917 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing now on hand, are estimated to have cost \$13,-692.27. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$11,192.27.

The value of household furniture in the Hospital is, at a low estimate, at least ten thousand dollars greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called eight thousand dollars. Collecting these several sums, the account of debit of the Commonwealth to the Hospital appears to be as follows:—

Excess of cost of land over direct bonus		\$ 20,590 00
Repairs and improvements		179,398 44
Excess of present cash assets		30,917 00
Increase of provisions and supplies		11,192 27
Increase of furniture	•	8,000 00
Total		\$ 250,097 71

The necessary current repairs of the buildings may be estimated at three thousand dollars annually. Deducting this sum for each of the fifteen years since Sept. 30, 1865, a total of \$45,000, there is a remainder of \$205,097.71. To this amount, then, has the Hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

STUDIES RELATIVE TO THE CURABILITY OF INSANITY.

Each of the last four annual reports of this Hospital contains a section devoted to the curability of insanity. It has there been shown, by the unanswerable testimony of statistics, that the disease is far less amenable to curative treatment than it has generally been believed to be in this country.

In the first of the four reports mentioned, — that for 1875—76, — there is a "review" of the subject, which was afterwards elaborated and published as part of the proceedings of the New-England Psychological Society, before which it had been read. Near the end of that essay are seven conclusions, in the form of direct propositions, which it is believed are legitimate deductions from the preceding argument. It is now proposed to show, as nearly as possibly can be shown, by direct evidence, that each of those conclusions can be proved to be true, beyond all cavil or dispute, to any candid mind.

CONCLUSION 1. — The reported recoveries from insanity are increased, to an important extent, by repeated recoveries from the periodical or recurrent form of the disease in the same person.

Many proofs of this are given in the pamphlet entitled "The Curability of Insanity;" but here we will present but five, some of which have been obtained since that pamphlet was published:—

At the Frankford Asylum.	5	persons	recovered	52	times.
Hartford Retreat .	5	- "	44	54	"
Bloomingdale Asylum	10	"	66	122	"
Worcester Hospital	10	"	46	136	"
Concord Asylum .	10	"	46	120	"
	_		-		
Consequently, the	40	46	"	484	"

The number of recoveries is more than twelve times as large as the number of persons that recovered.

CONCLUSION 2. — The recoveries of persons are much less numerous than the recoveries of patients or cases.

Proved by the same statistics as conclusion No. 1.

The number of persons is less than one-twelfth of the number of recoveries,— each recovery, of course, representing a patient, or a case.

Conclusion 3. — From the number of reported recoveries of cases, or patients, it is generally impossible to ascertain the number of persons who recovered.

Proved likewise by the same statistics. The four hundred and eighty-four *recoveries* were published merely as recoveries, without any explanation. Consequently no reader of them could tell how many *persons* furnished those recoveries. The natural inference was that there were four hundred and eighty-four, whereas there were but forty.

CONCLUSION 4.—The number of reported recoveries is influenced, sometimes largely, by the temperament of the reporter, each man having his own standard, or criterion, of insanity.

This conclusion is not susceptible of absolute proof; but it is a legitimate inference from the known diversity of organization, temperament, and mental character among men. There are, however, two instances, at least, in which statistics appear to warrant the conclusion:—

- (a) There was a change of superintendents at the Worcester Hospital in the official year 1871-72. In the three next preceding official years, under the old superintendent, the reported recoveries were equal to 43.32 per cent of the admissions; whereas, in the three next succeeding official years, under the new superintendent, the reported recoveries were only 22.16 per cent of the admissions. The reported proportion of recoveries in the first three years was very nearly twice as large as in the last three years. There is no conceivable and plausible cause for this difference other than that mentioned in the conclusion.
- (b) At the McLean Asylum there was a change of superintendents in March, 1871. During the next preceding seven years (1864 to 1870 inclusive) the proportion of reported recoveries equalled 44.19 per cent of the admissions; but in the succeeding seven years (1871 to 1877 inclusive) that proportion was only 19.94 per cent. The proportion of the reported recoveries in the first period was more than twice as large as it was in the second period, or as 221 to 100.

Conclusion 5. — The large proportion of recoveries formerly reported was (a) often based upon the number of patients discharged, instead of the number admitted; and (b) generally upon the results in a number of cases too small to justify the deduction therefrom of a general formula of scientific truth; and (c) those proportions were evidently increased by that zeal and rivalry which frequently characterize the earlier periods of a great philanthropic enterprise.

- (a) At a large proportion of the American hospitals, forty years ago, the ratio of recoveries was calculated on the number of patients discharged.
- (b) The most widely known of all remarkable percentages of recoveries of cases of recent insanity—those of the Hartford Retreat, in 1827—were based upon only twenty-three cases, of which twenty-two recovered; and one of the others,—that of the Williamsburg, Va., Asylum, in 1842,—upon only thirteen cases, of which twelve recovered.
- (c) There are various evidences of the existence of that zeal and rivalry in the earlier history of the hospitals, which need not be mentioned here.

Conclusion 6.—The assumed curability of insanity, as represented by those proportions of recoveries, has not only not been sustained, but has been practically disproved by subsequent and more extensive experience.

The assumption was, that from 75 to 90 per cent of the recent cases of insanity could be cured. The conclusion is proved by many statistics, but most especially by those of the Frankford Asylum, based upon the treatment of one thousand and sixty-one cases, treated in the course of about thirty-nine years. Only 65.69 per cent of these cases recovered. But so many of these were the repeated recoveries, on re-admission, of the same persons, that the percentage of persons who recovered was only 58.35. Many of these were not permanent recoveries. The actual proportion of persons, who, after one recovery, were never re-admitted, was only 48.39 per cent.

CONCLUSION 7.— The reported proportion of recoveries of all cases received at the institutions for the insane has been constantly diminishing during a period of from twenty to fifty years.

This conclusion is derived solely from the results of the table on p. 45 of the pamphlet on "The Curability of Insanity." In that table it is shown that, at twenty American hospitals, the average diminution of reported recoveries, in an average period of about twenty-five years, was from 46.08 to 34.26 per cent of the admissions. So that for every hundred that recovered, on an average of twenty-five years ago, only a fraction over seventy-four (74.34) recover now.

Worcester Statistics.— In the report issued one year ago from the hospital at Worcester, a new table was introduced, in which is shown, among other things, how many of the patients who were discharged as recovered within the year had recovered on former admissions. Forty-seven patients were discharged recovered, but only thirty-two recovered for the first time. Five recovered for the second time, six for the third time, two for the fourth time, one for the ninth time, and one for the tenth. Thus, fifteen of these patients have already been credited with fifty-five recoveries.

But the report contains something of still greater importance. Dr. Park has continued the work, begun several years ago by Dr. Eastman, of analyzing the eleven thousand cases admitted into that hospital prior to the 28th of September, 1875. He finds that the whole number of persons admitted was only 8,204, while the number of re-admissions was 2,796.

The re-admissions are equal to one-fourth of the whole number of admissions, and to one-third of the whole number of persons.

The recoveries on first admission were 3,191, or only 38.89 per cent of the *persons* admitted.

The recoveries in all the re-admissions were 1,191, making the whole number of recoveries 4,382.

Some of the persons who were not well when first discharged, recovered on some subsequent admission. We are not informed how many there were of these, but that information will undoubtedly be given in a future report.

A series of tabular figures show how many patients were received, on re-admission, each successive time, up to the twenty-third admission. The recoveries on each admission are also shown, and it is both interesting and instructive to perceive how the proportion of these recoveries increases as the number of re-admissions increases. The percentage of the recoveries, on each admission, is as follows:—

1st a	dmission,	38.89	9th	admission,	62.96	17th	admission,	66.66
2 d	"	36.78	10th		62.50	18th	"	66.66
3d		46.66	11th	4.6	61.11	19th	66	50.00
4th	44	45.81	12th	• 6	71.43	20th	44	100.00
5th	46	55.45	13th	44	66.66	21st	66	100.00
6th	46	61.29	14th	44	88.88	22d	4.6	100.00
7th	"	61.86	15th	6.6	57.14	23d	4.6	100.00
8th	4.6	60.60	16th	44	75.00			

These swollen percentages are caused by the repeated recoveries of the same persons.

The whole number of deaths was 1,498, or 18.26 per cent of the number of *persons*. This proportion is nearly three times as large as is generally shown in the annual statistics of the hospitals.

Dr. Park concludes his remarks upon the work of analysis in which he is engaged, with the following paragraph:—

"It is a sad, and almost cruel blow to the worth of the earlier tables of this hospital, which gave 70, 80, and even 90 per cent of recoveries, to know that deaths occurring within a few days of admission were not taken into account at all, but stricken entirely from the reports; that many a patient who helped to swell the tables of recoveries to the large per cent

mentioned, returned again and again to this hospital, and finally died here; that many went afterwards to other hospitals, and finally died in them; and that many more, after repeated admissions to this and other hospitals, died in the town or city almshouse, having been, to take the cold, utilitarian view which is the fashion of this world, 'a burden on their own property or that of their friends, or upon the public treasury,' from the time of their first admission to the hospital to their death."

The doctor will fail to take the full advantage of his opportunity, if, before he gets through with those statistics, he does not give to the profession and the people a more valuable paper illustrative of the actual curability of insanity than any heretofore published in this country.

In reference to the above-mentioned deaths, of which no account was taken in making up the statistics, there is an explanation which should be known. The first superintendent at Worcester openly maintained that it was unjust to both the institution and its medical officers to throw upon it and them the responsibility or burden of a death, when they had had no reasonable opportunity to prevent that death. This argument is plausible, but it can be used only by one who contemplates the subject from a narrow and strictly professional point of view. A hospital for the insane, however, has other than mere medical relations with the people; and it would generally be regarded as the duty of its superintendent to report every case of admission and every case of discharge, whether that discharge be by death or otherwise.

A Voice from England. — At the last meeting of the British Medical Association, Dr. D. Hack Tuke read a paper before the Psychological section of that society, "On the best Mode of tabulating Recoveries from Insanity in Asylum Reports," in which he comes essentially to the same conclusions, in respect to repeated recoveries of the same persons, that have been arrived at in what I have written upon the curability of insanity.

"All I object to," says he, "is allowing figures to go forward, year after year, to the public, representing the gross number of recoveries as the number of persons restored to society, able to resume their place as useful members of the

community; for, without some clearer mode of presenting the actual facts than at present obtains, they will believe that 100 recoveries represent 100 persons enjoying the use of their reason, instead of, in too many cases, oscillating between the world and the asylum. Then, in their ignorance of the tendency to the recurrence of insanity, they are astonished at the ever-increasing demands for new asylums, and the conclusion, out of all proportion to the fact, that there has been an increase of insanity. Nor will these misconceptions be dispelled till it is stated, in characters so legible that he who runs may read, how many of the published cures are only re-cures of relapsed cases."

The paper closes with a summary, under five heads, three of which are as follows:—

- "I. That the statistical tables in the reports of the asylums for the insane should contain a clear statement, not only of the re-admissions (specifying the number for each person, and distinguishing between re-admissions after recovery, improvement, &c.), but of the re-cures, showing separately the number of persons who have recovered.
- "II. That the percentage of recovery given in these tables should be that of persons recovered, calculated on persons admitted.
- "V. That the present plan of jumbling together, in the statistical table of recoveries, the gross number of cures and re-cures, is misleading, and occasions exaggerated views as to the curability of insanity, and proportionate disappointment when the demand is made for additional asylums."

The subjoined extract from Dr. Tuke's paper is introduced here as evidence that the experience with repeaters in recovery, in the English asylums, is very similar to that in the institutions in this country.

"I find that at the Hereford Asylum one patient was first admitted in consequence of a fifth attack, and recovered from that, and a sixth, seventh, eighth, ninth, and tenth attack. He had slighter attacks at home, not sufficient to bring him to the asylum, in the intervals. Of this patient Dr. Chapman says, that, although counting six recoveries, he really did not recover at all. Another patient, admitted in consequence of a fourth attack, recovered from that, and from a fifth, sixth, seventh, eighth, ninth, tenth, and eleventh attack.

Another, admitted for a second attack, recovered from it, and from a third, fourth, fifth, and sixth attack. Lastly, two patients, each admitted on the fourth attack, recovered from it, and from a fifth and a sixth attack. All these, and several others, Dr. Chapman has no doubt will return again and again. How can we call these 'cures'? Is it not a misnomer?"

It is now but a few months more than nine years since Dr. Chapman very courteously showed me through the Hereford Asylum, then in the process of construction, and not very nearly completed. Yet in the intervening period it has been finished and opened, and had time to make the somewhat remarkable record above related. One of its patients, as will be seen, has recovered eight times, and had recovered from three attacks before his first admission there.

Dr. Tuke gives formulas of new tables, by the use of which not only the re-admissions, but the repeated recoveries of patients, will be shown. There is good reason, not alone from this paper, but by other evidence as well, to believe that the time is not far distant at which the British asylums will remedy the very obvious defect in their numerical statistics.

There is one point in respect to which Dr. Tuke's views are so fully coincident with my own that I desire to call attention to them. Many writers, in treating of the curability of insanity, have made comparisons between that disease and others of severe form, such as fever, pneumonia, and rheumatism, maintaining that the former yields favorably to remedial treatment as often as any of the latter. Dr. Tuke says, "I cannot agree with those who hold that we should regard each cure of insanity in a patient in the same light as each cure of a physical disease, —pneumonia, for instance."...

clearly that the parallel is not a fair one, for the relapses after pneumonia and fever, when once cured, would be much less frequent than in mental disease; and the patient himself would be generally a sounder man, physically, in the interval, than the re-cured lunatic is mentally. Besides, from the different functions of the organs attacked, the permanent consolidation of a portion of one lung may allow a man to

perform efficiently the duties of his position in life; but the remains of an infinitesimal lesion of the brain may virtually incapacitate him from the efficient performance of his duties in the intervals between the attacks."

I gladly seize this opportunity to quote a still earlier expression of similar opinions by Dr. Strong of the Asylum for the Insane, near Cleveland, O. In a discussion at the meeting of superintendents, at Providence, in 1879, he said, "That insanity has, in modern times, changed its type, to some extent at least, there can be no doubt. I fail to see, however, in its recurrence, an analogy with other diseases, — pneumonia for instance, — which has been claimed by some gentlemen who have already spoken. Insanity is a disease involving the brain and nervous centres, — a disease which is, to a considerable extent, sui generis, and will not admit of close analogy to other diseases."

It appears to the present writer that there is about as close an analogy between pneumonia and insanity as there is between a broken bone and a broken promise.

A Voice from Scotland.— Within the year last past, Dr. W. A. F. Browne of Scotland has published a pamphlet entitled "The Curability of Insanity, Psychological Shadows," which contains much that is confirmatory of the views expressed in what I have written upon the same subject.

"Every superintendent," writes he, "must see in his registers cases which have been removed once or twice, or oftener, during the year; and I can recall one upright and distinguished member of our specialty who was found deploring the death of M. M., on the plea that for years her cure had been effected ten or a dozen times annually, and thus enormously swelled the percentages. This course was pursued in all candor and honesty, not merely as that generally, if not universally, prevalent, but because the cure was perfect, if not permanent, and because the law required it."

In Scotland, as in the United States, it appears that among the "recoveries" at the lunatic asylums are many cases of "delirium tremens and pseudo-dipsomania." Under the "Habitual Drunkards Act" inebriates could go voluntarily into an asylum, and leave it when they pleased. "It is known," says Dr. Browne, "that many of these inebriates adopted seclusion as the readiest refuge from bodily indispo-

sition or the social consequences of their errors, so that, when the *malaise* and the repentance had evaporated, they at once returned to the world and to their wallowing in the mire, but not until they had been honored by a certificate of recovery."

In regard to the absolute curability of mental disorders, a fact or a truth not yet attained, the doctor expresses his opinion in the following words:—

"It is highly probable that, at the present time, as when Thurnam wrote, 'In round numbers, of ten persons attacked by insanity, five recover and five die, sooner or later, during the attack. Of the five who recover, not more than two remain well during the rest of their lives. The other three sustain subsequent attacks, during which at least two of them die.'"

And finally, the pamphlet records, in the subjoined extract, its author's verdict upon the custom formerly very prevalent in this country, and even now not wholly abandoned, of giving the percentage of recoveries on the number of patients discharged, and sometimes of deducting from the whole number of patients all cases of idiocy, epilepsy, and paralysis, and even all deaths, and calculating the percent of recoveries on the remainder.

"It would be an insult to our existing convictions, and to the principles, which may be now pronounced catholic, regulating the estimates of the results of treatment in nervous diseases, to point out how utterly fallacious, deceptive, and Utopian, were such practices; but it is essential to our object to stigmatize them as subversive, on the one hand, of all correct notions as to prognosis in mental disease, and, upon the other, of the remedial powers which can be exercised for its removal or amelioration."

Scottish Patients of 1868. — There were 1,319 new cases of insanity admitted into the asylums of Scotland in 1868. A table in the Report for 1879 of the Commissioners in Lunacy for that country, shows the number of recoveries, not only on the first admission, but on re-admission, among those 1,319 persons, in each successive year to 1880.

"It appears," says the Report, "that the 1,319 patients admitted yielded 39 per cent of recoveries within the first two years, and during the succeeding ten years only 16 per cent.

It is to be kept in mind that one patient may yield more than one recovery, and it must not be concluded, therefore, that any thing approaching to these proportions are permanent recoveries. Indeed, it has been ascertained that a large number of the re-admissions are drawn from the recovered patients. If the whole of the re-admissions came from this source, the proportion of the 1,319 admitted in 1868, who had recovered and had not been re-admitted up to the present time, would be only 26 per cent. It may be believed, however, that some of the re-admissions were drawn from among the patients discharged unrecovered, and a further modification must be made on account of a considerable number of the re-admissions referring to a comparatively small number of patients, some patients being re-admitted many times during a period of twelve years."

New Statistical Tables.—But perhaps the occurrence of greatest importance in this direction, in the course of the official year, is the adoption by the Massachusetts State Board of Health, Lunacy, and Charity, of a set of tables for the more perspicuous and more accurate presentation of the numerical records of the medical history of the hospitals and asylums for the insane which are the property of the State. This is a striking indication of practical progress; and, whether this new system of tabulation be perfect or not, it is evidently a great improvement over that which has hitherto prevailed in this country. If it have defects, time will expose them, and furnish the opportunity for correction.

These tables have been used in the preparation of this report, and are herewith presented with only one regret on the part of the Superintendent of this Hospital. That regret has its origin in the fact that this reformation comes from what are familiarly termed outsiders. It ought to have come from the medical profession, and not that alone, but from the specialty of psychiatry, for the use of which the tables were designed.

Recovered versus Cured. — The following extract was written nearly twenty years ago by a physician not now in the specialty, but who, at that time, was at the head of one of the largest institutions for the insane in America. It is an exposition of his reasons for using the term recovered in preference to cured in his records of discharge. It is a spicy

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argument, and reveals the fact that it is no new thing for a physician engaged in the specialty to have comparatively little confidence in many of the recoveries announced in his reports.

"We discharge only recovered (cured, if you will) patients. I imagine their condition is exactly that of the cases which others call 'cured.' I have a sort of awkward compunction in the matter; and, in writing off a patient in the column headed 'Result,' I have felt my pen stiff when marshalling the five letters of the word 'c-u-r-e-d.'

"Topsy said she growed, and was never made by any one. One of my patients once told me the Devil growed, for God was too good and wise to make such a rascal. My patients recover. I think 'recover' is a neuter, or intransitive verb, meaning to grow well, or perhaps, oftener, only to grow better; therefore it meets my requirements of conscience better than the word 'cured,' which, being capable of a passive conjugation, insinuates that an intelligent agent has effected the change. And, further, these cured lunatics have such a mischievous trick of going mad again, some sooner, some later, and some oftener than others,—though some not at all,—that one feels a little timid to offer to the undiscriminating a word which they regard in a more unconditional signification than our specialty may do.

"If I take to a watchmaker, for repair or adjustment, a watch which I know is radically bad, I do not exact from him establishment of perfect performance, but am content with restoration to its primary capability. If this is curing my watch—cured it is; but I will be content to regard it as mere recovery (not however spontaneous) of its prior constitutional abnormality."

Alcoholic Insanity in the Hospitals.— Under this caption, in the Report for 1878-79, a pamphlet was mentioned which contains an estimate of the number of patients with transient insanity, "euphemiously called dipsomania," which would probably be found in a hospital with six hundred patients. The number appeared large, and it was so stated in my remarks. As the author of the pamphlet is a member of the Michigan Board of Charities, I wrote as follows:—

"This estimate is undoubtedly based upon the knowledge of the subject which he has derived from observation of the

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hospitals of Michigan, and perhaps of other States in that section of the country."

This inference, as I am informed by Dr. Henry M. Hurd of the asylum at Pontiac, was a "misapprehension," although, as he acknowledges, it "was natural enough, in view of the statements in the pamphlet." To prove that it was a misapprehension, he adduces some of the statistics of the institution mentioned:—

Of the 657 patients admitted to the Pontiac Asylum, "67 were known to have been intemperate in their habits." Of these, only 10 were dipsomaniacs, and not one of them was discharged recovered. The doctor does not say how many of the others recovered; but as 21 of them had chronic dementia, 3 dementia with paralysis, and 10 paresis, one of the most absolutely incurable of all the forms of mental disorder, while 2 more were epileptics, the number of recoveries could not have been large.

"I may also add," writes Dr. Hurd, "that I was an assistant for eight years at Kalamazoo, and during that time I know that the custom of the asylum was the same as adopted here. I am sure that no case of delirium tremens was under treatment during that period, and that cases of opium-habit were not considered recovered, even if they left the asylum sober."

INSTRUCTIVE STATISTICS.

I have received some information in regard to 118 cases of insanity which have been treated in American hospitals, and the statistics of which have been published, in the usual manner, in the annual reports of those institutions. Singularly enough, all the patients were females. They are here presented in a group, for a purpose which will be perceived by any person who carefully reads the whole of this article.

If Dr. Todd's well-known group of 23 cases at the Hartford Retreat, and Dr. Galt's group of 13 cases at Williamsburg, Va., were sufficient in number to justify the inferences in regard to curability which were drawn from them, and which were largely influential in establishing a prevailing belief, then may we safely be permitted to derive some inferences from this group, which is more than three times as numerous as both of them.

Age on Admission in 118 Cases of Insanity in Females.

AGB.						(CASES
From 26 to 30 y	ears,	inclusi	ve .				1
31 to 35	"	44				•	2
36 to 40	"	"					2
41 to 45	"	44			•		3
46 to 50	"	"					17
51 to 55	"	"					13
56 to 60	66	44					30
61 to 65	"	"					7
66 to 70	"	"					25
71 to 75	"	66				•	11
Unknown						•	7
To	tal			•	•		 118

Inferences. — Insanity in females under 45 years of age is very rare, but it prevails to its greatest extent among those who are from 45 to 60 years old. It is also very frequent between the ages of 65 and 75 years.

Age at First Admission.

AGE.				C.	ASES
From 26 to 30 years					23
41 to 45 "					59
46 to 50 "		•	•		36
Total				1	18

Inferences. — Of the three quinquennial periods in which all first admissions of insane females into hospitals take place, the period from 41 to 45 years of age furnishes the largest number. They are less frequent, though still numerous, from 46 to 50 years, and least frequent from 26 to 30 years.

Marital Relations.

It is a remarkable fact that, in all of these 118 cases, the patients were married.

Inferences. — Marriage is, in females, a most prolific cause of insanity. Mental disorders are apparently unknown among unmarried women.

Occupation, or Industrial Relations.

-	•			C	ASES.
Manufacturer's wife	е.				59
Farmer's wife .					36
Housekeeper .					22
Seamstress					1
Total					118

Inferences. — Of all females, the wives of manufacturers are the most prone to become insane. The wives of farmers are likewise greatly liable to the disease, and housekeepers suffer largely from the malign influence. Seamstresses have been known to become insane, but very rarely. In all other positions in society it would appear that females are exempt from mental disease.

Results of Treatment.

				-				-	ASES.
Recovered	•	•	•		•	•	•	• :	102
Much impr	oved	•	•				•		1
Improved									5
Result not	record	led							7
Unknown	•					•	•	•	2
Died .			•			•			1
	Tot	lal			_				118

Inferences. — Insanity in females is one of the most curable of all diseases. Of 118 patients treated in the hospitals, 102 went forth "clothed and in their right mind," to bless their families, to make happy homes, and to become producers instead of consumers. This is equal to 86.44 per cent.

Deaths among insane females are as rare as recoveries are frequent. Of the 118 patients above mentioned, only one died. This is only eighty-four hundredths of one per cent of the cases treated. In what other disease of any severity is the mortality so small?

Explanation of the Foregoing Statistics.

On the assumption that my information is correct, and I have no reason to doubt either its authenticity or its accuracy, the foregoing tabulated figures are a true representation, so far as they go, of the history, in relation to insanity, of THREE PERSONS, all of them married women. The three women were admitted to hospitals a total of 118 times, and discharged as "recovered" (or under some recorded word or words which signified recovery) 102 times. Having contributed the 102 recoveries to the published statistics of insanity, one of them died, insane, in a hospital; another died, insane, at home; and the third and last, at the age of about 75 years, has entered an almshouse, there to spend the remainder of her days. In the future, as for many years in the past, so long as she lives, she will doubtless have from

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one to two attacks of insanity annually; and the probability is great that she will eventually die insane.

Portrait of Miss Dix. — The following preamble and resolution, which tell their own story, and require no comment in this place, were passed at the regular meeting of the Board of Trustees, held on the 5th of November, 1879, and placed upon the records of that day's proceedings: —

"In view of the long and devoted labors of Miss D. L. Dix in the philanthropic enterprise for the improvement of the condition of the insane, it is eminently proper that some memorial of her should be in the possession of this institution,—

"Therefore voted, That the Superintendent be authorized to request of Miss Dix a portrait of herself for one of the public rooms of this Hospital."

A copy of this record was communicated to Miss Dix, and she kindly consented to comply with the request therein contained. The valuable gift, which is well executed and considered an excellent likeness, has been received and placed in the chapel.

Acknowledgments. — The obligations of the inmates of the Hospital are hereby acknowledged, with thanks, to the several persons who have contributed to their entertainment by gifts of valuable publications: to Silas M. Smith, for three bound volumes; to Miss C. L. Bailey, for two bound volumes; to Miss Florence Austin, for five bound volumes, and a quantity of magazines and newspapers; to Mrs. J. H. Butler, for a large number of magazines; to Miss Julia Clark, of the Northampton Book Club, for several volumes of magazines; to S. E. Bridgman, for a quantity of religious newspapers; and to the publishers of "The Christian Register," for one copy, weekly, and the publishers of "The Staaten Zeitung," for two copies, weekly, of those publications.

The curtain falls between us and the work of another vanished year; and now, with an appreciative sense of the active interest and the honest and sincere endeavors of all those whose labors have given to that work its measure of success, whether it be the members of your Board or the persons who surround me in the Hospital, I look hopefully forward to the cares and the enjoyments, the certainties and the uncertainties, of the year that is to come.

PLINY EARLE.

APPENDIX.

6

APPENDIX.

THE table of general statistics near the beginning of the Superintendent's report, together with the first twenty-three of this Appendix, constitute the series already mentioned as adopted by the State Board of Health, Lunacy, and Charity, for the purpose of obtaining uniform statistics from the institutions for the insane which belong to this Commonwealth, as well as for the further purpose of getting those numerical results in a form by which the defects of former methods will be obviated, the sphere of the information conveyed by them enlarged, and that information made more accurate, and consequently more worthy of confidence.

The tables were not received until after the expiration of one-half of the official year, and hence there are some deficiencies in the filling of them which could not well be prevented. The eleventh is made up in the old method, by reporting the causes chiefly as alleged by the friends of the patients, or by other parties outside of the Hospital, rather than the *probable* causes, in the opinion of the Superintendent. The new method will probably be pursued in the preparation of this table in future.

Notwithstanding these imperfections, it is believed that, as a whole, the tables will immediately convince the reader of their great superiority over those which they have superseded.

2. Monthly Admissions, Discharges, and Averages.

Months.	ΑD	MI88 10	NS.		schar ding D	eaths.)		THE HOUS	
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
1879.									
October	5	5	10	2 2	4	6	227.03	220.03	447.06
November	5 5	. 6	11		5	7	229 20	218.53	447.73
December	5	8	13	6	5	11	229.58	220 93	450.51
1880.									
January	5	3	8	5	4	9	229 29	220.83	450.12
February	3	1	4	5	_	5	226.41	222.14	448.55
March	8	8	11	4	2	6	227.87	226.42	454.29
April	5	8 2	7	7	5	12	224.70	226.73	451.48
May	7	4	11	2	5	7	226.77	225.77	452.54
June	4	6	10	5	6	11	228.33	226.37	454.70
July	6	8	14	7	5	12	227.22	225.81	453.03
August	4	1	5	4	8	12	226.22	225.00	451.22
September .	7	6	18	11	4	15	224.60	220.13	444.78
Total of cases .		58	117	60	53	113	· -		_
Total of persons,		57	115	59	52	111	_	_	_
Daily average for the year.	_	_	_	-	_	_	227.28	223.23	450.51

^{*} These totals were obtained by a division of the sums of daily residence for the year by 366, the number of days in the year.

3. Received on First and Subsequent Admissions.

NUMBER	OF T	HE AD	MISSI	ON.	CAS	ES ADMIT	ED.	1	es previou	
					Males.	Females.	Total.	Males.	Females.	Total.
First .	•	•		•	50	47	97	_	_	_
Second					. 6	7	13	2	8	5
Third .					2	2	4	1	8	4
Fourth	•	•	•		1	1	2	8	2	5
Twelfth	•	•	•	•	-	1	1	-	8	8
Total	of a	cases			59	58	117	6	16	22
Total	of a	ersons			58	57	115	-	-	_

4. Ages of Persons admitted for the First Time.

AGES.			AT FIR	SANITY.	OF IX-	WHEN ADMITTED.				
			Males.	Females.	Total.	Males.	Females.	Total.		
Fifteen years and less	3.		8	2	5	2	_	2		
From 15 to 20 years			6	2 8 6 2 7 9 8 3	9	4	• 4	8		
20 to 25 "			2	6	8 8	9	3	12		
25 to 80 "			6	2	8	9	8	17		
80 to 35 "			5	7	12 i	9	7	9		
35 to 40 ''			5	9	14	15	5	20		
40 to 50 "			5 2 8	8	10	4	10	14		
50 to 60 ''			8	3	6	4 2 8	6	8		
60 to 70 "	_		_	1	1	8	8	6		
70 to 80 "			_	1 - 1	_	_	l - i	_		
Over 80 years .			_	_	_	1 -	_	_		
Unknown	•	•	18	6	24	-	1	1		
Total of persons			50	47	97	50	47	97		

5. Parentage of Persons admitted.

					MA	LES.	FEN	ALES.	TOTAL		
PLACES	OF 1	NA7	ri vity.		Father.	Mother.	Father.	Mother.	Father.	Mother.	
Massachuse	tts				22	18	12	12	84	30	
New Hamp	shire				_	_	2	1	2	1	
Vermont					2	_	1	_	3	_	
Rhode Islan	ıd				2 2 1 1	1	1	_	3	1	
Connecticut	;				1	6	2	5	3 3 2 1	11	
New York					1	2	1	2	2	4	
Pennsylvan	ia				1 1	1	_	_	1	1	
Virginia	•				1	_	l _	_	1		
Louisiana					i –	1	-	_	_	1 8 4	
Canada					8	8	5	5 3	8	8	
England					1	1	8	8	4	4	
Scotland					_	_	8	8	8	3	
Ireland					18	18	23	28	41	41	
France					1	1	_	_	1	1	
Germany					4	4	-	_	4		
Italy .					_	_	1	1	1	1 1	
Syria .	•				_	_	ī	1	1	1	
Unknown	•		•		1	2	2	1	3	3	
Totals				•	58	58	57	57	115	115	

6. Residence of Persons admitted.

PL	ACE8	•				Males.	Females.	Total.
Massachusetts:								
Hampden County					.	23	86	59
Berkshire County					.	15	11	26
Hampshire County					.	9	5	14
Franklin County		•				9	4	13
Worcester County						2	_	2
Bristol County .				•		-	1	1
Total of persons	•		•	•		58	57	115
Cities or large towns	٠.			•		24	84	58
Country districts	•	•		•		34	28	57
Total of persons						58	57	115

^{*} Containing not less than 10,000 inhabitants.

7. Civil Condition of Persons admitted.

			U	MARRI	ED.	N.	ARRIE	D. *	W	DOW	BD.	DIVORCED.			
THE ADM		r.	Males.	Females.	Total.	Malos.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
First .			31	19	50	19	24	48	_	3	8	-	1	1	
Second			8	8	6	1	2	8	-	1	1	1	_	1	
Third .			1	1	2	-	1	1	-	_	_	1	_	1	
Fourth			-	_	-	1	_	1	-	1	1	_	_	_	
Twelfth	•		_	1	1	-	-	-	-	-	-	-	-	-	
Total of	perso	ns,	35	24	59	21	27	48	-	5	5	2	1	8	

8. Occupations of Persons admitted.

OCCUPATIONS.	Ma.	Fe.	Tota	OCCUPATIONS.	Ma.	Fe.	Tot
Teacher	1	_	1	Carpenter	1	_	1
Student	2	_	2	Cabinet-maker .	1	! -	1
Clergyman's wife .	_	1	1	Basket-maker .	1	_	1
Insurance agent .	1	_	1	Painter	1	_	1
Contractor	1	_	1	Painter's wife .	_	1	1
Printer	1	_	1	Mason's wife .	_	1	1
Printer's wife .	_	1	1	Shoemaker	1	_	1
Farmer	5	_	5	Shoe-laster	1	_	1
Farmer's wife .	_	3	8	Miller	1	_	1
Farmer's son	1	_	1	Barber	1	_	1
Farm-laborer	5	_	5	Bar-tender	1	_	1
Teamster	1	-	1	Paper-maker	2	_	2
Teamster's wife .	_	1	1	Rag-sorter (pick-			
Laborer	15	_	15	er)	_	1	1
Laborer's wife .	_	3	8	Whitewasher .	1	_	1
Butcher	1	_	1	Stucco-worker's			i
Mill-operative .	8	5	8	wife	_	1	1
Weaver	1	3	4	Musician's wife .	-	1	1
Mill-operative's wife,	_	1	1	Housekeeper .	_	3	8
Mill-operative's				Nurse	_	1	1
daughter	_	1	1	Domestic	_	2	2
Cutler	1	_	1	Pilot's daughter .	_	1	1
Machinist	1	-	1	None	5	4	9
Armorer	1	_	1	Unknown	_	20	20*
Mechanic's wife .	_	1	1				
Gold - pen maker's				Total of persons.	58	57	115
wife	_	1	1			-	

^{*} These were female patients admitted before the tables were received.

9. Reported Duration of Insanity before Last Admission.

PREVIOUS DURATION.			SSION PITAL.	1	OTHER SKOISS		TOTAL		
	Ma.	Fe.	Tot	Ma.	re.	Tot.	Ma.	Fe.	Tot.
Congenital				_					
Under 1 month	8	8	16	- 1	_	- 1	8	8	10
From 1 to 3 months .	11	12	23	_		_	11	12	28
. 3 to 6 "	5	5	10	_	١ ـ	_	5	5	10
6 to 12 " .	آ ا	2	-6	_	1	1	4	3	7
1 40 0	4	2	6	1	ī	2	5	3	8
9+2 5 44	1 0	6	15	2	4	6	ıĭ	10	21
5 to 10 "	1	4	5	ī	3	4	2	17	9
	li	3		3		4		:	8
10 60 20	1	1 3	4		1		4	4	
Over 20 years		l i		2	1	8	2	2	4
Unknown	7	4	11	-	-	-	7	4	11
Total of cases	50	47	97	9	11	20	59	58	117
Total of persons.	-	-	-	-	-	-	58	57	115
Average of known cases .			y. m. 2 5	yrs. 11 ⁸ / ₉	yrs. 7 5	yrs. 9-9-0	-	-	-

^{*} In this division of the table the whole period of time, from the first attack to the last admission, is indicated.

10. Form of Disease in the Cases admitted.

Fo	RM (F DI	SEASE	: .			Males.	Females.	Total.
Mania, acute			•	•		. i	24	20	44
Mania, chronic						.	13	16	29
Mania, paretic						.	2	1 - 1	2
Mania, epileptic						.	3	2	5
Typhomania				•		. !	_	1 1	1
Monomania.						.	2	-	2
Melancholia						.	8	15	23
Dementia .		•		•			5	4	9
Not insane .	•	•	•	•	•	.	2	-	2
Total of cas	es					.	59	58	117
Total of per					•	.	5 8	57	115

11. Alleged Causes of Insanity in Persons admitted.

	C4	USE	8.			Males.	Females.	Total.
	M	ental					İ	
Hard study .						2	-	2
Domestic trouble		•			.	_	4	4
Trouble .					.	1	2	8
Disappointment					.	-	3	8
Pecuniary trouble	в				.	1	_	1
Religious exciten	ent				.	1	1 1	2
Nostalgia .					.	1	-	ĩ
Loss of friends						_	8	3
Total of men	tal					6	13	19

11. Alleged Causes of Insanity in Persons admitted — Con.

•	CA	USES	3.				Males.	Females.	Total.
	Ph	ysica	ı.						
Ill health .		٠.	•			. 1	5	6	11
Intemperance	•			•	•		6	2	8
Overwork .			•				4	4 1	8 7 2 4
Masturbation			•				4 6 2 8	1	7
Injury to head			•			.	2	_	2 .
Epilepsy .						.	3	1	4
Cerebral mening	ritis		•			.	_	1	1
Syphilis . Child-birth .	•					.	1	-	1
Child-birth .					•		_	1	1
Lactation .				•	•		-	1 3 8 1	1 3
Change of life Constitutional						.	-	3	. 3
Constitutional	•						-	3	3
Periodical .						٠ ا	_		1 2
Congenital .	•	•	•	•	•	•	1	1	2
Total of ph	vsica	ι.					28	25	53
Total of me	ntal						6	13	19
Unknown .	•					.	22	19	41
Not insane .	•	•	•	•	•	•	2	_	2
Total of per	sons	•		•			58	57	115

12. Relation to Hospitals of the Persons admitted.

	Males.	Females.	Total
Never before in any hospital	46	40	86
Former inmates of this hospital . Former inmates of other hospitals in this	7	7	14
State: — Danvers	1	_	1
Taunton	_	1	1
Former inmates of hospitals in other States. Former inmates of this hospital and of other	2	4	6
hospitals in this State (Worcester) Former inmates of this hospital and of hos-	-	2	2
pitals in other States	-	1	1
Former inmates of other hospitals in this State (Danvers), and of hospitals in other	_		_
States Former inmates of this hospital, of other hospitals in this State (Worcester), and of	1	-	1
hospitals in other States	1		1
Former inmates of hospital in Canada		1	i
Former inmates of hospital in England .	_	i	î
Total of persons	58	57	115

13. Discharges, classified by Admission and Result.

_								BRC	RECOVERED.		MUCH IMPROVED.	Impre	VED.	, X	IMPROVED.	ė	UXI	Uximproyed.	Ġ.		DIED.			TOTAL.	
		ADA	A DMISSION	<u>بر</u>				Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	LatoT
First .	•			•	•	•	•	13	∞	77	5	9	11	G	Ξ	20	6	7	16	14	11	25	23	43	93
Second	•	•	•	•	•	•	•	01	ı	63	1	1	ı	0)	-	က	ł	81	C)	C/J	-	က	9	4	10
Third .			•	•	•	•	•	-	က	4	ı	ı	1	1	1	ı	ı	-	-	-	ı	-	61	4	9
Fourth	•			•	•	•	•	1	1	1	1		-	ı	ı	1	ſ	1	1	ı	ı	ı	1	-	-
Twelfth	•		•	•	•	•	•	1	-	-	ı	ı	ı	ł	1	ı	ı	ı	ı	1	ı	ı	ı		-
Total of cases	ses			•	•	•	•	18	2	88	2	1	12	=	12	23	6	ន	12	11	ᄗ	29	58	53	Ε.
Total of persons	person	হ	•	•	•	•	•	1	ı	1	1	1	,	1	1	1	1	1	ı	1	ı	ł	22	52	109

* Two men were discharged as not insane, making the total of cases 113, and the total of persons 111.

14. How supported.

SUPPORTED	AS		PATI	IKDA STKI	TTED.	AVER	AGE OF TE	IR YRAR.
			Males.	Females.	Total.	Males.	Females.	Total.
State patients .			17	16	83	_	_	197.03
Town patients.			29	31	60	-	-	198.01
Private patients	•	•	13	11	24	-	-	55.46
Total of cases	•		59	58	117	-	-	450.50

15. Cases discharged Recovered. Duration.

		TION BI		Hospi	TAL RES	IDENCE.		E DUR.	
PERIOD.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Congenital.	_	_ :	_		_		_	_	
Under 1 month .	6	4	10	1	2	3	_	-	_
From 1 to 3 mos.	2	8	5	8	4	12	1	4	5
8 to 6 ".	4	2	6	4	3	7	5	2	7
6 to 12 " .	1	_	1	2	2	4	5	3	8
	1	-	1			i i	_	_	
1 to 2 yrs	-	_	_	1	1	2	2	1	3
2 to 5 ".	-	1	1		-	-	-	1	1
5 to 10 " .	-	-	-	-	-	-	-	-	-
10 to 20 " .	-	-	_	_	-	-	-	-	-
Over 20 years .	-	-	_	-	-	_	-	-	-
Unknown	3	2	5	_	-	-	3	1	4
Total of cases .	16	12	28	16	12	28	16	12	28
Total of persons,	16	12	28	16	12	28	16	12	28
Average of known									
cases (in mos.),	$2\frac{7}{18}$	58	329	45	5	417	68	9,7	711

16. Cases resulting in Death. Duration.	<i>16</i> .	Cases	resulting	in	Death.	$oldsymbol{D}$ uration.
---	-------------	-------	-----------	----	--------	-------------------------

		TION BE		Hospit	AL RESI	DENCE.		LE DURA	
PERIOD.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital . Under 1 month . From 1 to 3 mos. 3 to 6 " 6 to 12 " 1 to 2 yrs. 2 to 5 " 5 to 10 " 10 to 20 " Over 20 years .	1 2 2 1 2 2 2 2 2	1 1 4 - 2 1 1 1 1	1 3 5 5 2 4 3 3 3	- 1 2 1 1 4 3 2 -	- 1 2 1 1 - 2 8 1	- 2 4 2 2 4 5 6 3	- 1 2 - 2 3 2 4	- 1 - 4 - 3 1 2	- 2 2 4 2 3 5 4 2
Unknown	1	1	2	1 -		-	1	1	
Total Average of known cases (in mos.),	17 85	12 34 ₁ 2 ₁	29 64 3 7	17 42	73	29 54 ₂₄	17 122	12 1041	29 114

17. Cases discharged by Recovery or Death.

				B	RCOVERIE	J.		DEATHS.	
FORM OF IN	SAN	ITY.		Males.	Females.	Total.	Males.	Females.	Total.
Mania, acute				14	7	21	8	-	8
Mania, chronic Mania, paretic	:	:	•	-	_	_	4	2	3 4
Mania, epileptic Typhomania	:	:	•	_	1 -	1	4	-	4 1
Monomania. Melancholia	•	•	•	- 2	- 4	- 6	-	5	5
Dementia .	:	•	:	_	-	-	5	4	9
Total of cas	es	. •		16	12	28	17	12	29
Total of per	sons			16	12	28	17	12	29

18. Causes of Death.

CAUSES.		Males.	Females.	Total.
Nervous System. — Paresis		4	_	4
Epilepsy	.	4	_	4
Apoplexy	. 1	_	1 1	1
Typhomania	.	_	1 1	1
Nervous exhaustion	. 1	1		_
Respiratory. — Phthisis pulmonalis .	. 1	2	3	5
Tuberculosis	. 1	_	1 1	1
Pulmonary congestion .	.	_	l ī l	1
Pneumonia	. 1	1	l ī!	2
Circulatory. — Disease of heart		$ar{2}$	-	2
Digestive. — Gastritis		_	1 1	ī
General. — Inflammatory rheumatism.		1		ī
Marasmus		2	_	$\bar{2}$
Old age		_	1 1	ī
Accidental. — Injury from fall	٠,	_	l î l	ī
Suicide		_	î	î
Totals		17	12	29

19. Deaths, classified by Results of Previous Admissions.

NO. OF THE AD-	REC	OVE	RED.		CH		Imi	PROV	ED.	Uni	MPRO	VED.	<u> </u>	Гота	L.
MISSION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ма.	Fe.	Tot.
First Second	-	- -	-	-	<u>-</u>	-	1 -	1 -	2	2	-	2	3	1 -	4
Total of cases,	-	-	-	-	-	-	1	1	2	3	-	3	4	1	5*

^{*} These five cases represent but four persons, one of the persons having had two former admissions, and, consequently, two results.

20. Recoveries, classified by Results of Previous Admissions.*

NO. OF THE AD-		OVE	RED.		C C H		In	PROV	ED.	Uni	MPRO	VED.	7	OTAI	
MISSION.	:	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First Second	13	8	21	-	_	-	_	-	-	-	_	-	18 2	8	21 2
Third	î	3	4	-	-	-	ļ - ,	-	-	-	-	-	Ĩ	8	4
Twelfth .	-	1	1	-	_	-	-	=	=	-	-	-	-	ī	1
Tot. of persons,	15	12	27	1	_	1	-	_	-	-	_	-	16	12	28

^{*} In all the cases of more than one admission, this classification is based upon the result of the admission next preceding the last, in each case respectively.

21. Deaths, classified by Duration of Insanity and of Treatment.

PERIOD.			DUBAT	on of In	SANITY.		Known Pi fal Residi	
			Males.	Females.	Total.	Males.	Females.	Total.
Congenital			- 1 1 - 2 4 2 4 2 1	- 1 - 4 - 3 1 3	214245551	1 2 1 1 4 3 3 2 -	- 1 2 1 1 - 2 8 1 1	-24 22 4 5 6 8 1
Total			17	12	29	17	12	29
Average of known of months)	case s •	(in •	122	10 1	114	42	73	54 2 4

^{*} Eight of the patients, four men and four women, represented in this table, had been treated in other hospitals; but the time of their residence there is not known; and therefore not included.

22. Ages of Those who Died.

AG	E8.	•		AT TI	ME OF THE ATTACK.	FIRST	AT T	THE OF D	BATH.
				Males.	Females.	Total.	Males.	Females.	Total.
Fifteen years a From 15 to 20	nd le	8 .	•	2 2	-	2 3	-	_	<u>-</u>
20 to 25	y cais	•	•			_	ii	1 1	2
25 to 30	"	•	:	2	2	4	3		2 3
30 to 35	66			1	2 3 2 2 2	4	_	1 1	1
35 to 40	66			1	2	4 3 3 5	3	1 4 1 8	7
40 to 50	44	•		1	2	3	3 5 1 3	1 1	6
50 to 60	66			3	2	5	1	3	4
60 to 70	66	•		`1	1 - 1	1	8	- 1	4 3 2
70 to 80	66			_	-	-	_	2	2
Unknown .	•	•	•	4	-	4	-	-	-
Totals .		•	•	17	12	29	17	12	29

23. Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1880.

									NEV	NEW CASES.*	£8.*								
		-							"	DISCHARGED AND DIED IN 1879-80,	GED AN	ID DIEI	187 NI G	19-80.					
YEARS.			ADKITTED.		REC	RECOVERED.	٠.	Мися	MUCH IMPROVED.	red.	IME	IMPROVED.		UNIN	UNIMPROVED.	٠	1	DIED.	
	20[0]4	Males.	Females.	Total.	Males.	Females.	.lstoT	Males.	Females.	.fatoT	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1858, 2 months .		8	129	228	1	ı	ı			-1	1	-	-	 I	1		•		-
1858-59		42	46	88	ı	1	ı	1		ı	ı	ı	1	1	,	1	ı	1	•
1859-60	-	99	16	157	ı	,	1	ı		,	ı	 I	,		 I	ı	1	-	7
1860-61	•	88	46	101	•	1	,	ı	ı	ı	1	,	<u> </u>	1	1	1	ı	1	1
1861–62		21	43	₽	ı	ı	1	ı	1	1		1	•	ı	ı	ı	1	1	1
1862-63		28	22	113	. 1	1	•	1		1	1	,	ı	ı	1	1	ı	ı	1
1863-64			8	88	,	ı	ı	ı	1	ı	ı	1	1	ı		1	1	ı	1
1884-65		25	18	109	ı	1	,	ı	1	1	1.	<u> </u>	ı	1	1	1	,	ı	1
1855 66 . ,		98	23	118	1	1	,	·	1		1	1	1	•	1	1	ı	1	1
1866-67		23	8	111	,		ı		1	1	1	1	1	1	,	ı	-	•	-
1867–68			r	135	•	1	•	ı	1	-	1	-	 I	-	-	-	<u> </u>	•	ı

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130	183	181	168	158	155	133	126	110	33	8	94	2,887
\$	103	88	8	8	8	8	8	123	75	85	47	1,452
13	86	ಜ	88	8	3 8	19	æ	38	31	49	8	1,435
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1808-m	1860-70	1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	1879-80	Totals

Seven patients, 1 man and 6 women, were recommitted, and re-entered in the register without leaving the house; and 3 men, on return from escape, were re-entered. These 10 patients make the The total of registered admissions to Sept. 30, 1880, is 3,421. In this table the new cases, 2,837, plus the re-admissions, 524, equal 3,411. * Two men discharged as "not insane," are not included in this table, there being no column for them. total, 3,421.

23. Annual Admissions since the Opening of the Hospital, with the Dischurges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1880 — Concluded.

							RE	ADMI	RE-ADMITTED CASES.	CASES								REMAI	REMAINING OF EACH	EACH
								Dī	Discharged and Died in 1879-80.	ED AN	ID DIR	ID IN 1	879-80.					YEAR	YEAR'S ADMISSIONS,	GIONS,
TEARS.	,	ADAITIBD.	•	REC	RECOVERED.		MUCH IMPROVED.	PROVE		IMPROVED.	VED.	Š	UNIMPROVED.	VBD.		DIED.		SE	SEPT. 30, 1880.	03
	Males.	Females.	.faloT	Males.	Females.	.fatoT	Males.	Females.	Total.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	.latoT
58, 2 months .	1	-	ı	ı	1	-			- 	1				ı	ı	ı	ı	14	ю	19
1858-59	4	П	×	ı	ı		<u> </u>		1	-	1		1	ı	ı	1		က	63	ю
1859-60	-	ಣ	10	1	1	· 1	<u>.</u>		-	1	1	1	ı	ı	١.	1		4	63	9
1860-61	13	-	8	1	1	· 1	<u>.</u>		1	1	1	1	ı	ı	ı	1	ı	က	-	₹
1861-62	13	ю	18	ı	1	· ·	· 1	<u>'</u>	1	1	1	1	ı	ı	J	ı	1	6	-	4
1862-63	14	11	83	•	1	1	·	'	1	ı	1	t	ı	,	1		1	63	20	1
1863-64	ឌ	51	23	1	-		<u>.</u>	<u>'</u>	1 		1	-	ı	1	1	1	1	-	69	တ
1864-65	. 16	о	প্ত	ı		· ·	<u>.</u>	<u>'</u>	1	-	1	1	1	•	1	ı	1	4	H	10
	6	۵	18	,	1		· ;	<u>'</u>	<u>'</u>		(۱.	-	-	ı	ı	1	9	တ	6
1866-67	19	œ	23	1	1	· '	<u>.</u>	<u>'</u>	- -	'	-	1	1	,	1		,	69	4	9
1867-68	14	21	21		·		<u>.</u>				<u>'</u>		1	,	ı	•		က	41	~

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13	2	16	18	13	19	14	13	13	6	14	œ	280
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•	•	•	•	•	•	•	•	•	•	•	•	
1868-69	1869-70	1870-71	1871-73	° 1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	1879-80	Totals

24. Relapsed Cases admitted in each Year, and discharged in 1880.

							CASE	PREV	TOUSE	OASES PREVIOUSLY RECOVERED IN THIS HOSPITAL.	OVER	ED IN	THIS	HOSPI	TAL.						
	•	A Parimeter	-						Д івси,	DISCHARGED AND DIED IN 1880.	AND DI	ED IN	1880.					-	RE	REMAINING	
TEARS Ending	3		·	RE	RECOVERED.	·-	Мисн	MUCH IMPROVED.	ÆD.	IXI	IMPROVED.	 _	UMI	UNIMPROVED.	Ä		Digd.		887	SEPT. 30, 1880.	œ.
SEPT. 30.	Males.	Females.	.fatoT	Males.	Females.	Total.	Males.	Females.	.latoT	Zales.	Females.	.fatoT	Males.	Females.	.latoT	Mules.	Females.	.fatoT	Males.	Females.	.latoT
1858, 2 mos.		-	•	1		1	-	1													
1850-60			3 ×		,			1	,		,			1		1		(1	,	ı
1860-61	3 oc	1 1	٥¥	1 1	1 1	1		1			ı	,	1	,	1	1	1	1		ı	ı
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1864-65		4	12	ı	ı	:	•	ı	1	ı	1	1	1	ı	,	1	•	•	67	ı	67
1865-66		m	<u>-</u>	1	ı	ı	1	,	1	1	ı	•	ı	-	-	,	•	,	•	-	-
1005-67		9	11	,	1		•	ı	ı	ı	•	ı	1	ı	,	•	1	•	,	•	,
1867–68		<u>-</u>	22	1	ı	ı		1	1	1	1	•		,	1	,	ı	ı	,	•	1
1868-69	_	c .	2	ı	ı	1	1	1	1	,	,	•		•	1	1	1	ı	ı	ı	•
1869-70		4	တ	ı	ı	ı	1	1	1	1	ı	1	•	ı	1	1	ı	ı	1	1	ı
1870-71	_	9	Ξ	1	1	•	1	1	ı	•	ı	•	ı	1	1	1	,	1	ı	1	
1871-72		9	7	•	,	1	1	•	•	1	•	1	•	,	•		ı	•	•	•	
1872-73	_	20	Ξ	,	1	•	1	1	ı	•		ı	•	,	,	•	1	,	,	2	8
1873-74		œ	22	1	ı	1	1	,	1	1	1	1	ı	ı	1	•	1	-	ı	8	103
1874-75		10	<u>-</u>	1	ı	'	•	1	1	•	ı	1	,	ı	,	,	1	,	ı	~	8
1875-76		9	=	ı	ı	,	•	ı	,	•	:	ı	1	•	ı	•	ı	1	-	1	-
1876-77		00	22	•	ı	1	ı	•	1	1	,	,	,	1	•	1	•	ı	4	o:	-
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1878-79		10	6	63	-	က	•	•		•	1	ı	ı	-	1	ı	-	1	• •	00	103
1879-80		9	6	•	63	83	1	1	,	•	1	1	ı	,	1	•	1	1	က	4	-
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Totals .	3	121	240	N	4	0	:	ı	ı	1		1	ı	٦	٦	ı		ı	=	=	8
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Also, recovered elsewhere, not known.

25. Classed Average of Patients	<i>25</i> .	Classed	Average	of	Patients
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OFFIC	IAL	YEAR	•	State Patients.	: Town Patients.	Private Patients.	Total.
Month	ly A	verage	٤.				
1864-65				225.10	48.16	69.83	343.25
1865-66		•		252.16	50.58	75.58	378.33
Week	y A	verage	·.				
1866-67	_			261.96	49.46	89.75	401.17
1867-68		•		262.65	47.92	103.06	413.63
1868-69	•			248.52	54.98	101.46	404.96
1869-70	•			236.19	65.04	107.23	408.46
1870-71		•		234.10	77.07	118.38	429.55
1871-72				226.96	89.57	112.27	428.80
1872-73			•	248.02	99.23	90.00	437.25
1873-74		-		284.48	102.88	82.06	469.42
1874-75			•	274.35	128.34	72.46	475.15
1875-76		•	·	259.19	146.02	68.94	474.15
1876-77		-		254.84	161.58	60.02	476.44
1877-78		-		211.90	175.71	54.75	442.36
1878-79		-		200.34	182.29	54.23	436.86
1879-80	-	-	•	197.03	198.01	55.46	450.50

' 26. Monthly Consumption of Gas.

_		3	HTKO	s. •				Cubic Feet.	Daily Average
			1879.	,					
October							. i	33,750	1,088.70
November					٠.		.	41,200	1,373.33
December	•	•		•	•	•	•	45,950	1,482.25
			1880.				- 1		1
January							.	43,150	1,391.93
February	٠.						. 1	35,250	1,215 51
March .	•						.	29,750	959.67
April .							.	20,200	673.33
May .							.	12,850	414.51
June .	.*						.	10,200	340.00
July .							.	10,100	825.80
August							.	12,600	406.45
September	•	•	•	•	•	•	-	19,900	663.33
Totals								814,900	860.38

^{*} Daily average for the year.

27. Supplies for the Several Departments for the Year 1879-80.

Lantern.	1	1	ı	-	1	ı	1	ı	1	1
Forks.	-	10	ଷ	ı	잭	ı	ı	1	1	ī
Knives.	22	70	63	ı	1	C1	ı		ı	8
Strup-cups.	-	ı	1	_	ı	1	1	1	ı	1
Ріссьетв.	63	7	ı	1	1	1	1	ı	2	1
Bowls.	ဗ	13	ı	70	-	ı	ı	1	2	ı
.83a M	1	ı	9	1	9	7	15	ı	ı	1
Tumblers.	34	10	ı	ı	ı	1	03	ı	1	ı
Saucers.	18	15	30	18	16	9	1	12	4	ı
Cups.	15	20	ı	ı	-	ı	1	ı	ı	ı
Plates.	15	က	8	œ	8	Į	12	12	4	1
Carpet-strips.	6	4	C3	. ~	1	_	ı	1	ı	-
Compar	ı	70	70	1	တ	က	co	61	တ	1
Hair-brushes.	1	တ	-	1	2	ı	7	1	1	1
Mirrora	ı	-	1	ı		C1	1	ł	-	<u> </u>
Сратрета	မ	12	က	4	11	16	14	21	10	
EM618.	ı	_	1	1	l ———	<u> </u>	1			1
Wash-bowls.	l	C3	1	1	- 1	ı	1.	١,	_	1
Curtains.	က	9	1	_	ı	67	70	9	က	
Towels.	12	24	00	9	က	1	ı	1	4	
Pillow-ticks.	==	10	တ	9	1	5	ı		ı	1
Bed-ticks.	4	14	18	14	17	15	12	83	13	1
Rubber Sheets.		20	63	i	က	_	-	4	ı	
Blanketa.	- ro	6	52	ı	10	~~	1	ı	∞	
Bed spreads.		-	4	အ	15	l	11	1		12
Pillow-cases.	<u>8</u>	34	48	21	12	56	18	58	46	
Sheets.	48	32	33	30	42	40	12	4.	52	∞
	Men's Department. Upper 1st Hall	2d Hall	8d and 4th Halls.	Middle 1st Hall	2d Hall	3d and 4th Halls.	Lower 1st Hall	2d Hall	3d and 4th Halls.	Women's Department. Upper 1st Hall
	A Uppe			Midd			Lowe			W _c

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2d Hall	8d Hall	4th Hall	Middle 1st Hall	2d Hall	8d Hall	4th Hall	Lower 1st Hall	2d Hall	3d Hall	4th Hall	Xitchen	Rear	Sentre .	Aggregate

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Spools Thread.	ı	ı	ı	1	ı	ı	ı	ı	ı	1
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Blacking.	9	8	13	14	17	17	16	18	91	ı
Spittoons.	က	8		1	1	7	1	63	တ	ı
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Glass Casters.	က	1	- 1	2	69	ı	ı.	ı	-	1
Spoons.	14	ı	ı	ı	1	1	1	ı	1	ı
	Men's Department. Upper 1st Hall	2d Hall	3d and 4th Halls.	Middle 1st Hall	2d Hall .	3d and 4th Halls.	Lower 1st Hall	2d Hall	3d and 4th Halls.	Women's Department. Upper 1st Hall
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	Cines Creters. Table-spreads. Yapkins. Tin Plates. Tin Cnps. Iron Spoons. Dish-towels. Brooms. Brooms. Brooms. Dist-basins. Brooms. Prucks. Indies. Brooms. Brooms. Prucks. Prucks. Brooms. Brooms. Prucks. Prucks. Brooms. Brooms. Brooms. Brooms. Prucks. Prucks. Brooms. Prucks. Brooms. Brooms. Brooms. Prucks. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms. Brooms.	Table-spreads. Class Casters. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table. Table. Dast-paris. Dast-paris. Dast-paris. Dast-paris. Dast-paris. Table. Spoole Thread. Tables. Table. Skeins Linen. Tables. Table.	Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table-spreads. Table. Ta	Halls Shoots Thread. Halls Hal	The content of the	th Halls	th	Men's Department. Men's Department. Tin Plates. 2d Hall . 14 Cidaes Casters. 2d Hall . 14 Tin Plates. 2d Hall . 1 1 30 12 6 Dish-towels. 2d Hall . 1 1 30 18 6 Dish-towels. 3d and 4th Halls . 1 1 30 10 50 20 3d and 4th Halls . 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 . 1 2 3 . 2 3 30 1 1<	Men's Department. Upper 1st Hall Classe Casters. Men's Department. Tablès-proads. Spoons. Classe Casters. 2d Hall . 14 3 12.5 6 . 15.0 6 . 17.0 Factors. 2d Hall . 1 1 . 1 1 . 30 12.5 6 . 30	Men's Department. Upper 1st Hall Chase Cnaters. 2d Hall . 14 3 Chase Cnaters. 2d Hall . 14 3 Tin Piates. 2d Hall . 14 3 Tin Piates. 3d and 4th Halls . 1 1 3 3 3d and 4th Halls . 1 1 3 3 Spointables. 2d Hall . 1 1 3 3 Spilloons. 3d and 4th Halls . 1 1 1 3 3 Spilloons. 2d Hall . 1 1 2 2 2 3 Jonet-brushes. 2d Hall . 1 1 1 2 2 3 Jonet-brushes. 2d Hall . 1 1 1 2 2 3 Jonet-brushes. 1 . 1 2 1 1 4 4 1 1 1 3 Jonet-brushes. 1 . 1 . 1

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2d Hall	8d Hall	4th Hall	Middle 1st Hall	2d Hall	8d Hall	4th Hall	Lower 1st Hall	2d Hall	8d Hall	4th Hall	Kitchen	Rear	Centre	Aggregate	ر آ
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28. Days' Work by Patients.

MONTHS.		FARM.		Kitchen		SEWING- ROOM.		Laundry	•
		Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total.
1879.									
October		727	124	272	396	214	23	301	824
November		491	120	232	852	212	20	269	289
December		495	124	242	366	164	23	808	831
1880.									
January		522	124	228	852	178	22	310	832
February		293	116	252	368	148	20	276	296
March .		346	124	254	378	146	23	327	850
April .	•	637	120	239	359	149	22	309	331
Мау .		723	124	244	368	127	21	805	326
June .		775	120	262	382	126	22	325	347
July .		802	124	234	358	159	23	821	344
August.		734	124	261	385	145	22	297	319
September		689	120	270	890	139	22	804	326
Totals		7,234	1,464	2,990	4,454	1,907	263	3,652	3,915

The total of days' work here recorded is 17,510. This is what was performed by the regular workers on the farm and in the three departments mentioned. No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler-room, the mattress-room, and the carpenter's shop. A large amount of other work is done both in the halls, and, at irregular times, out of them.

29. List of Articles made in the Sewing-Room.

_			•				
Dresses .		•	•	267	Straw-ticks	•	97
Chemises .	•	•	•	209	Sheets	•	509
Skirts .	•	•		244	Pillow-cases		453
Sacques .	•		•	10	Bolster-cases		44
Drawers .		•		63	Bureau-cover		1
Aprons .				205	Clothes-bags		29
Night-dresses				5	Towels		287
Waists .				5	Roller-towels		137
Caps				15	Table-spreads .		70
Under-vests				2	Table-cloths		16
Hats trimmed				3 8	Bed-spreads made .		7
Shirts .				380	Bed-spreads hemmed		50
Pants (pairs)				6	Curtains		65
Suspenders				199	Carpet made		1
Camisoles .				39	Carpet-strips hemmed		75
Collars .				175	Napkins hemmed .		14
Handkerchiefs !	hem	med		151	Carriage-linings .		2
Mattress-ticks				149	Carriage-cover		1
Pillow-ticks				87	Sundries		4
Feather-ticks				11	Articles repaired .		20,568
Bolster-ticks				8		Ī	,
	_						

30. Upholstery done in the Year.

						6
						74
•	•		•			60
						25
rease	of b	usks		•	•	47
				•		17
	rease	rease of h	rease of husks	rease of husks	rease of husks	rease of husks

31. Annual Cost of Gas.

	Y	EAR.				Cost of Gas.	Average Number of Patients.	Cost per Patient
1860-61	•	•	•	•	•	\$ 2,030 39	814.26	\$ 6 46
1861-62		•	•	•	•	2,085 29	313.80	6 64
1862-63	•	•	•	•	•	2,109 02	355.63	5 93
1863-64	•		•	•		2,069 79	857.63	5 78
1864-65	•		•	•	•	1,653 05	342.40	4 82
1865-66		•		•	•	1,107 98	376.35	2 94
1866-67		•	•			1,056 16	401.03	2 6
1867-68		•			•	1,022 51	418.41	2 47
1868-69		•	•			903 92	405.10	2 2
1869–70	• ·				•	915 30	408.83	2 2
1870-71						1,043 99	421.90	2 4
1871–72		•	•			980 94	428.72	2 2
1872-73		•	•		•	1,006 61	437.23	2 3
1373-74		•			•	1,066 74	469.54	2 2
1874–75	•		•			1,012 63	475.35	2 1
1875-76	•					1,089 82	474.21	2 2
1876-77	•	•	•	•		1,033 59	476.16	2 1
1877-78	•	•	•	•		1,066 02	442.43	2 4
1878-79		•	•			1,033 05	436.73	2 3
1879-80	•					945 00	450.51	2 1

The Hospital has always been supplied with gas by the Northampton Gas-Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since that time it has been but \$3.00, including meter-rent.

32. Trustees of the Northampton Lunatic Hospital.

NAME.	Residence.	When app'ted.	Service ended.	From what Cause.
Charles E. Forbes .	Northampton .	1856	1857	Term expired.
Lucien C. Boynton .	Uxbridge	1856	1858	do. do.
Eliphalet Trask .	Springfield	1856	1875	do. do.
John C. Russell* .	Great Barrington,	1856	1859	Resigned.
Horace Lyman	Greenfield	1856	1857	Removed.
Charles Smith	Northampton .	1857	1860	Resigned.
Luther V. Bell* .	Somerville	1857	1859	do.
Zebina L. Raymond*	Greenfield	1858	1859	do.
Franklin Ripley* .	Greenfield	1859	1860	Died in office.
Edward Dickinson *.	Amherst	1859	1864	Resigned.
Walter Laflin * .	Pittsfield	1859	1866	Term expired.
Silas M. Smith .	Northampton .	1860	1863	do. do.
Charles Allen	Greenfield	1860	1861	Resigned.
Alfred R. Field * .	Greenfield	1861	1864	do.
Edward Hitchcock .	Amherst	1863	1879	do.
Silas M. Smith .	Northampton .	1864	-	Still in office.
Edmund H. Sawyer *	Easthampton .	1864	1879	Died in office.
Henry L. Sabin .	Williamstown .	1866	1876	Term expired.
Adams C. Deane .	Greenfield	1875	-	Still in office.
Henry W. Taft .	Pittsfield	1876	_	do. do.
William M. Gaylord,	Northampton .	1879	_	do. do.
Lyman D. James .	Williamsburg .	1879	-	do. do.

^{*} Deceased.

33. Number of Persons other than Officers employed in the Regular Duties of the Hospital.

	occui	PATI	ONS.	_		Males.	Females.	Total.
Supervisors .	•					1	1	2
Assistant Superv	risors					_	1	1
Assistant Clerk						_	1	1
Seamstress .						-	1	1
Assistant Seams	tress					-	1	1
Laundress .						-	1	1
Assistant Laund	ress					_	1	1
Baker						1	_	1
Assistant Baker						1	_	1
Steward .						1	_	1
General Attenda	ints					11	15	26
Housework, cen	tre bu	ildi	ng	•		_	2	2
Cook				•	•	-	1	1
Assistant Cooks						1	8	4
Rear Dining-roo	m					-	1	1
Watchman .						1	-	1
Carpenters .				•		8	_	3
Painter .			•			1	_	1
Assistant Engin	eer		•			1	_	1
Night Engineer			•			1	_	1
Hostler .			•	•	•	1	_	1
Paver and Lawr	-dres	ser				1	_	1
Farmers .						7	_	7
Totals .						82	29	61

34. Officers and Employés.
Time employed March 1, 1880.

NAME.	Years.	Months.	Days
Pliny Earle, M.D., Superintendent	. 15	7	26
Edward B. Nims, M.D., 1st Assistant Physician	. 11	2	14
Daniel Pickard, M.D., 2d Assistant Physician	2	10	22
Walton D Walton Clark	. 14	-	14
Ago Weight Formion	. 22	3	
Danfard Maria Eurica	15	-	7
Innomial E Charfolt Campanian	15	10	4
Two-A Cilbant Coman-Tara	13	-	18
F Toponhua Dies Stomand	01	4	24
Mann Wand Considering		6	3
Mall Dussell I amadassa	۱ ۵	111	8
Charles Zichiles Daken	17	6	_
Eventor C. Perla Assistant Clark		111	6
Atlanta J. McPhee, Assistant Supervisor .	4	5	12
		10	12
	• -		
	. 1	9	19
	. 10	4	16
	. 6	10	11
	. 5	11	11
	. 4	11	6
	. 5	9	29
	. 1	10	6
	. -	9	24
Albert Alberty, Attendant	. -	4	16
Curtis Carmean, Attendant	. -	2	13
	.	7	-
Maria E. Graves, Attendant	. 12	1 1	7
Martha R Harris Attandant	. 5	6	7
Jane McGuire, Attendant	. 4	10	8
Nellie M. Henchy, Attendant	. 4	2 1	2
Marr Danson Attandent	. 4	8	15
Victorio C. Chummus Attendent	. 3	8	9
Toro Woodard Attendant	. 8	4	10
Naile Diel Attendent	. 8	4	23
Flower on To Disc. Attendant	i o	5	18
Simmin T Childril Addam doub	1 1	5	24
J. D. Hama Attandant		11	16
Marrie TO Matterna Attendant	· <u>-</u>	l ii l	9
Tabal D. Dalma Attandant	· <u>-</u>	10	3
	•	9	26
	• -	6	20 4
	. 8	8	2
	. 2	8	8
	. 2	7	1
Charles H. Lacore, Assistant Cook	. 1	9	6

Officers and Employés - Concluded.

NAME.		Years.	Months.	Days.
Carrie Egen, Assistant Cook	:	 Years.	4 5 4 7 5 2 1 10 11 3 6	18 14 22 11 17 25 30 7 23 - 18 14 4
James Madden, Paver and Lawn-dresser Benjamin Rockwell, Assistant Farmer John Mercier, Assistant Farmer Eugene Sullivan, Assistant Farmer Elson E. Howes, Assistant Farmer Julius Freeman, Assistant Farmer Henry Wilson, Assistant Farmer	•	12 12 7 2	10 9 8 10 11 7 10	23 24 8

Twelve of the persons have not been in their present situations during the whole period of service; for example, the supervisors, the assistant supervisor, and the seamstress, were formerly attendants.

Nine of the persons have been employed more than once. In the e instances the table gives the total time of service.

35. Salaries and Wages.

Superintendent	•		•			•		per year, \$	2,200	00
Treasurer .								"	300	
Treasurer (for cler)	k hire	, and	l paid	to a c	lerk)			66	200	00
Assistant Physicia	n	•	•			•		44	1,300	00
Assistant Physicia	n		•					44	750	00
Clerk (who makes	the p	urcha	ises)					44	900	00
Farmer	•	•	•					66	900	00
Engineer .				•				44	900	00
Assistant Clerk				•				per month,	80	00
Male Supervisor					•			44	46	00
Female Supervisor								. 66	25	00
Steward (with chi-	ef wo	rk in	kitch	ien)		•		44	46	00
Seamstress .	•	•	•	•	•			44	20	00
Assistant Seamstr	e 8 8							44	14	00
Two Laundresses,	each	•	•			•		44	16	00
Baker		•						"	46	00
Assistant Baker	•			•		•		44	18	00
Man attandants		:4 (101 m		mth 4	for the	. a	met these m	antha	~£

Men attendants are paid \$21 per month for the first three months of service, \$23 the next three months, \$25 the next six months, and \$28 afterwards.

Female attendants are paid \$13 per month the first three months, \$14 the next three months, \$15 the next six months, and \$16 afterwards.

In the kitchen are one woman at \$15 per month, and three at \$14 each, and one man at \$18.

In the centre and the rear building are one woman at \$15 per month, and two at \$14 each.

Assistant Engineer	•	•	•		per month,	\$ 32 00
Night Engineer .					44	28 00

Farm and stable,—one man at \$32 per month, two at \$28, three at \$25, one at \$23, and one at \$20, all with board; and one at \$1.25 per day, without board.

Watchman	•	•	•	•	per month,	\$ 28 00
Painter .					66	50 00

Carpenters, — one at \$2.75 per day, with dinner; one at \$2.25, with table-board; and one at \$1.50, with table-board.

The regular number of attendants is twenty-six, of whom eleven are men, and fifteen women
The daily average number of patients for the year just closed was 450.
Hence we find that the average number of patients to each attendant is, for the men, twenty; for the women, fifteen; for the total of both sexes, seventeen.

TWENTY-SIXTH ANNUAL REPORT

OF

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT NORTHAMPTON,

FOR THE YEAR ENDING SEPTEMBER 30, 1881.

BOSTON:

Rand, Aberp, & Co., Printers to the Commonwealth,
117 Franklin Street.

1882.

OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

LYMAN D. JAMES, Esq			•			WILLIAMSBURG.
Hox. WILLIAM M. GAYLORD		•				NORTHAMPTON.
SILAS M. SMITH, E3Q		•	•	•	•	NORTHAMPTON.
ADAMS C. DEANE. M.D	•	•				GREENFIELD.
HENRY W. TAFT, Esq		• .				PITTSFIELD.

RESIDENT OFFICERS.

PLINY EARLE, A.M., M.D.	•	•	•	Superintendent.
EDWARD B. NIMS, M.D	•	•	•	FIRST ASSISTANT PHYSICIAN.
DANIEL PICKARD, M.D	•			SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON .	•		•	CLERE.
ASA WRIGHT	•	•	•	FARMER.
DANFORD MORSE	•	•	•	Engineer.

TREASURER.

PLINY EARLE	•	•		•	٠.	•		•	NORTHAMPTON.
		0	FFIC	S AT	THE	Hosp	ITAL.		

SUBORDINATE OFFICERS.

ROBERT H. GALLIVAN	•	•	•	•	•	•	MALE SUPERVISOR.
LUCY A. GILBERT .	•		•			•	FEMALE SUPERVISOR.
F. JOSEPHUS RICE .		•	•		•	•	STEWARD.
MARY E. WARD	•		•		•	•	Seamstress.
ELLEN R. SAWYER .	•	•		•		•	LAUNDRESS.
CHARLES ZIEHLKÉ .	•	•	•	•	•	•	BAKER.

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Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To his Excellency the Governor of the Commonwealth and the Honorable Council.

AGREEABLY to the provisions of the statute law, the undersigned, Trustees of the Northampton Lunatic Hospital, lay before you the results of another official year, making the Twenty-sixth Annual Report of the institution with the general direction of which they are intrusted.

A brief abstract of the results of the operations of the hospital in its medical department is as follows:—

At the beginning of the official year, Oct. 1, 1880, the number of patients in the house was, of men, 223; women, 223; total 446,—the numbers of the two sexes being, by a noteworthy coincidence, equal. During the official year the number admitted was, of men, 57, and of women, 66; making a total of 123. The aggregate of these numbers, representing the whole number under care in the course of the year, is, of men, 280; of women, 289; total, 569. The number discharged from the hospital during the same period was, of men, 51, and of women, 55; a total of 106. Twenty-six patients were removed by death. Of these, 16 were men and 10 women.

The number of patients remaining in the house at the end of the official year, Sept. 30, 1881, was 464; of whom 220 were men and 284 women. The daily average number for the year was a fraction less than 452; the largest number on any day was 466, on four days in August; and the least number 489, on five days in January and February.

The results of treatment, as shown by the recorded mental condition of the 80 patients who left the hospital, are as follows: recovered, 20; much improved, 13; improved, 30; unimproved, 16; not insane, 1.

In our report for the official year 1879-80, it was shown that, although for many years the hospital was dependent upon the other similar State institutions of the Commonwealth for a very considerable part of the patients admitted, the time had at length arrived at which there was a release from that dependence, and our numbers were kept up by direct commitments from the four western counties of the State. Judging from the experience of the official year just closed, the hospital will in future not only be kept full by these direct admissions, but the time is not far distant at which it must be enlarged, or find relief from overcrowding by the transfer of its surplus patients to some other receptacle.

The official year began Oct. 1, 1880, with 446 patients in the house; it closed with 463; an increase of 17 in the course of the year. The increase would have been still greater if no inmates had been discharged excepting such as were in condition to resume their duties in society, or to be cared for among their relatives, friends, or guardians. In the course of the last winter a department for chronic insane was opened in the almshouse of Springfield, to which nineteen of the wards of that city who were here, but who had ceased to require hospital treatment, were removed. Having been assured that physically they would be made as comfortable as they were here, and that they would be under the surveillance of the State authorities, we consented to their removal. To the excess of patients (17) now in the house over the number one year ago, the number (19) thus removed to another receptacle should be added, in order to obtain the true increase within the year of insane persons in this part of the State who require the care of the public institutions.

The most important, as well as the most expensive, improvement of the hospital in the course of the year is the introduction of a steam fire-pump, as an additional precaution against destruction by conflagration. The building was already supplied with six portable fire-extinguishers; it also

had four hydrants on the outside, and sixteen within, directly connected with the town water-pipes, which are fed from a pend, the surface of which is about thirty feet higher than the top of the hospital cupola. There is not a patient's room in the house which cannot be reached by the nozzle of the hose attached to some one of the interior hydrants.

The pump is one of Knowles's patent, with a four-way hose connection. It has a sixteen-inch steam-cylinder, and a seven-inch water-cylinder, with twelve-inch stroke, throwing 1_{700}^{90} gallons at each stroke, and able to bear a rapidity of two hundred and fifty strokes per minute. To supply the old hydrants, there were 843 feet of four-inch, and 208 feet of two-and-a-half and two-inch iron pipe. Four double out-of-door and six in-door hydrants, with 789 feet of five-inch, 754 feet of four-inch, and 37 feet of three-inch pipe, have been added. The old and the new system of pipes are connected, so that all of the hydrants, both new and old, can be used either with the pressure from the town water-works or with that of the pump.

The ice-house heretofore used is on Mill River, near the north-east corner of the farm, distant very nearly a mile from the hospital by the nearest route suitable for loaded teams; and the water of the river has recently been rendered more impure by the opening into it of sewers. For the purpose of obtaining very pure ice, an artificial pond has recently been made by Wright and Rust, on a small stream about a mile south-west of the hospital. Under these circumstances, and for these reasons, we caused a new ice-house to be erected in the autumn of 1880. It is of the same size as the old one, and stands quite near the hospital. The ice stored in it came from Wright and Rust's pond, and is used only for drinking and table purposes. The house at Mill River was filled, and the ice is used in the refrigerators.

As before mentioned, the north-easterly part of the farm can be reached by teams only by a round-about road. The land in that section has recently been brought under cultivation, and the frequency of passing between it and the buildings, already not inconsiderable for the transportation of ice, has thus been largely increased; consequently a shorter route is much to be desired. By grading a precipitous hill on the southerly bank of the river, a road saving nearly

half the distance can readily be made. It was decided, in the early part of the official year, that this should be done, and a contract for the work was made with Mr. Samuel Parsons. The earth removed in grading is used to fill the gulch washed out by the freshet which carried away the ice-house nearly three years ago. The severity of the winter was such as to prevent the prosecution of the work; but it is hoped that it will be finished before the close of the current calendar year.

The grading of the eastern extremity of the lot on the south side of the county road was mentioned in our last year's report. After it was finished, and late in the calendar year, the lot was enclosed upon that side by an iron fence nearly eight hundred feet in length.

Concrete walks to the extent of several hundred yards have been laid on the west side of the hospital.

According to our estimate, the actual average current expense for each patient during the official year was \$169.04, or \$3.242 per week.

During the same period our charges for board were -

For State patients				•			\$30,676	28
town patients		•					36,055	16
private patien ts	•	•	•	•	•	•	15,516	38
Total	_			_			882,247	82

The Treasurer has presented his Annual Report, and it is herewith transmitted for your examination. It contains the accustomed details, under specific heads, of all money received and money disbursed; and bears the approval of the auditing committee of our Board.

It appears from the balances of the accounts that, at the end of the official year, Sept. 30, 1881, there were —

Reserve fund				\$ 10,000 00
Cash assets available for future use	•	•	•	26,681 26
Total		•		\$36,681 26
And liabilities (bills payable) .		•	•	5,711 05
Balance in favor of the hospital				\$ 30,970 21

Aside from these cash assets, we had on hand a quantity of purchased provisions and supplies valued at \$15,456.20,

together with all the productions of the farm which have been garnered for future use.

No change has taken place in the staff of principal resident officers. Of the subordinate officers of one year ago, J. E. Shufelt, supervisor, and Nell Russell, laundress, have left. They had both performed their duties satisfactorily, the former during the long period of more than sixteen years; and the latter more than four years.

Our regular meetings have been held, as heretofore, at the Hospital; and, as the result of inspection at these and at other times, we are of the opinion that the institution was never in a better condition, or more completely adapted to its work, than it is at the present time.

L. D. JAMES, Chairman, WM. M. GAYLORD, S. M. SMITH, A. C. DEANE, HENRY W. TAFT.

NORTHAMPTON, Oct. 6, 1881.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE NORTHAMPTON LUNATIO HOSPITAL, SEPT. 30, 1881.

Superintendent and Physician		•		•	per year	\$ 2,500 Q 0
First Assistant Physician .					"	1,500 00
Second Assistant Physician.		•	•		48	900 00
Treasurer	•	•			44	800 80
Treasurer, for clerk-hire and pas	id to	a cle	rk		44	206 00
Clerk	•	•			46	900 00
Farmer	•				46	900 00
Engineer		•			44	900 00
Assistant clerk			•		per month	30 00
Supervisor (male)					- "	35 00
Supervisor (female)					46	25 00
Assistant supervisor (female)					u	20 00
Seamstress			•		44	20 00
Assistant seamstress					44	13 00
Laundress	•				66	16 00
Assistant laundress					44	16 00
Baker					44	46 00
Assistant baker					••	20 00
Steward					6.6	54 17
Attendants (male) (6) .					44	30 00
Attendant (male) (1) .	•	•			44	28 00
Attendants (male) (2) .					**	25 00
Attendants (male) (3) .	• .		•		44	21 00
Attendants (female) (13) .		•			46	16 00
Attendant (female) (1) .		•			4.6	15 00
Attendant (female) (1) .			•		44	13 00
Housework, centre (female) (2)		•			44	15 00
Cook (female) (1)		•			44	16 00
Assistant cook (male) (1) .					44	20 00
Assistant cooks (female) (2)					44	14 00
Assistant cook (female) (1)					44 .	13 00
Farmer's dining-room (female)	(1)				"	14 00
Watchman	•				46	80 00
Carpenter		•			per day	2 25
Carpenter						1 50
Painter			•		per month	50 00
Assistant engineer					- "	82 0 0
Night engineer and florist in sur	nmer	•			44	28 00

1881.]	PU	13								
Coachman .	•			•	•	•		per month	\$ 25	00
Farm-hand (1)								- ` ««	82	00
Farm-hand (1)	•							"	28	00
Farm-hands (3)) .				•			46	25	00
Farm-hand (1)) .		•		•			44	23	00
Farm-hand (1)		•		•	•	•	•	44	21	00

In the warm season we generally hire one or two farm-hands by the day.

INVENTORY OF STOCK AND SUPPLIES

On Hand Sept. 30, 1881.

Live-stock on the	farn	a.	• .							\$5,194	00
Produce of the fa	rm c	n ha	nd							8,480	00
Carriages and ag	ricul	tural	imple	emen	ts.		•			3,997	00
Machinery and m	echa	nical	fixtu	res	•	•		•		9,579	00
Beds and bedding	z in i	nmat	es' d	epart	ment		•	•		11,650	25
Other furniture i	n inı	nates	' dep	artm	ent	•	• .	•		4,816	83
Personal property	of S	State	in St	ıperi	ntend	ent's	depar	rtmen	ե.	9,342	87
Ready-made cloth	ning		•	•	•		•			8,144	71
Dry-goods .	•		•	•		•				2,622	68
Provisions and gr	ocer	ies	•	•		•				8,452	06
Drugs and medic	ines	•	•	•	•	•				500	00
Fuel		•	•	•	•			•		6,234	75
Library	•	•	•	•	•	•	•	•		800	00
Total										\$69,813	65

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

THE financial condition of the hospital, for the official year 1880-81, is set forth in the following statement:—

Assets.

Three hundred and forty	acres (of lar	nd		\$10,000	00		
Hospital building .		•			250,000	00		
Two dwelling-houses .		•			4,000		•	
Two barns	•				5,500	00		
Stable	٠.			•	2,000	00		
Other buildings					0,500	00		
						_	\$308,000	00
	Pers	IAZO	Es Es	TATE.				
Stock and supplies on ha	nd. as	per	inve	ntorv	appended	to		
the Trustees' Report							69,813	65
Reserve fund							10,000	00
•								
							\$ 387,81 3	ÜĐ
]	Rece	IP TS .					
Cash on hand Sept. 80, 18	380						\$5,289	54
Received from the State T		rer					31,218	89
from towns .				•			38,376	
from individuals							15,677	3 0
from sales .	• .		-	• •			2,065	88
from interest			•				732	25
							\$ 93,360	64
	F	AYM	ENTS				• .,	
44 61 1							-07 404	F 0
1st. Salaries, wages, an			•	•	• •	•	\$ 25,434	93
2d. Provisions amd sur		VIZ:			6 7 400	^1		
Meats of all k		•	•	•	. \$5,468			
Fish of all kin		•	•	•	. 1,411			
Fruit and vege			•	•	. 956			
Flour and brea		• • • • • • • • • • • • • • • • • • • •	•	•	. 4,865			
Grain and mea			-	•	. 285			
Grain and mea	u ior i	stock.	•	•	. 1,934	<u> </u>		
Amounts carried for	ward			•	\$14,921	58	\$ 25, 434	52

	Amounts b				•	•	\$	14,921	58	\$ 25,434 5	2
		coffee, ar			e.	•	•	732	89		
		r and mo		•	•	•	•	2,419	53		
		er and che		•	•	•	•	8,763	69		
	Salt	and other	groce	ries	•	•	•	8,793	65	25,631 8	4
8 d.	Clothing					•		_		8,562 2	
4th.	Fuel and		•			•		-		8,118 2	
5th.	Medicine			uppli	es	•		•		1,539 8	
6th.	Furniture								-	2,900 0	
7th.	Transpor					enses				378 8	
8th.	Ordinary						•	•		3,032 9	
9th.	Extraordi						•	-		9,291 0	
10th.	Miscellan						•	•	-	0,202	•
		rm stock						\$ 1,597	58		
		ırm suppl		•	·	•		4,158			
		ater .		•	:	:	•	750	00		
		inor expe		•		•	•	644	99		
		ontingend			•	•	•	1,115			
	0. C	ourmReno	169	•	•	•	•	1,110		8,266 1	3
										\$88,155 2	-
			_							•	
			L	IABII	LITIE	8.					
Salari	es and wag	es due O	ct. 1.	1881						\$3,521 8	5
	laneous bi									2,189 7	
			•	Ť	Ĭ	•	·	•	•		-
										\$ 5,711 0	5
Drag 41	ha imadidudi	an fan ha	4 A	_4 1	100						
	he instituti rom State				100	ı —		97 050	70		
•			•	•	•	•		6 7,658 10,308			
	towns		•	•	•	•					
D 6		duals.			•	•		8,424			
Due 1	rom Treasu	rer Sept.	30, 1	991	•	•	•	5,203	38	26,597 1	Λ
										20,001	_
										\$20,886 0	5
				O		_				•	
			i	Вома	(ARY	: -					
Total	receipts		•	•		•		•		\$93,360 6	4
Total	payments		•					•		88,155 2	в
	•										_
										8 5,205 8	8
Total	liabilities									6 3 711 A	K
			•	•	•	•	•	•	•	\$ 5,711 0	
TOTAL	debts due	ine instit	ution	•	•	•	•	•	•	26,597 1	V
Total	expenditur	es .	•	•	•	•		•	•	\$88,155 2	6
Divid	ing this sun	a b v 45 1.7	'0. the	aver	age i	umbe	r of	patien	ts.		
	ve have the								,	\$ 206.64	6
	the average							of .	•	8.96	
			-1		, P-	£	,		•		-

Deducting from the total expenditures The extraordinary expenses	•	•	•	•	\$88,155 26 9,291 03
We have the current expenses .	•			•	\$ 78,864 23
Dividing \$78,864.23 by 451.79, the average tients, we have the average expenditure part of the average weekly expenditure part of the a	ire p	er pat	ient	ра- •	\$174.559 8.347
Deducting from the current cash expendit The increase of personal assets	ures •	•		•	\$78,864 28 2,493 31
We have the apparent necessary cost	for t	he ye	ar	. •	\$ 76,370 92
Dividing \$76,870.92 by 451.79, the average tients, we have, as the annual cost of Making the average weekly cost of each p.	eacl	ı pati	r of pent	pa- •	\$169 04 3.242

PLINY EARLE, Treasurer.

NORTHAMPTON, October 6, 1881.

We have performed our duty as auditors of the Treasurer's accounts, and find that there is a proper voucher for every entry.

WM. M. GAYLORD, ADAMS C. DEANE.

OCTOBER 6, 1881.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

In entering upon an exposition of the operations of the hospital for another year, I perceive no better method of introducing the subject than by a presentation of the usual table, which embodies the leading results of those operations.

1. General Statistics, 1880-81.

	Males.	Females.	Totals.
Patients in Hospital Oct. 1, 1880	223	223	446
Admitted within the year	57	66	123
Whole number of cases within the year .	280	289	569
Discharged within the year	51	55	106
Viz., as recovered	7	13	20
as much improved	6	7	13
as improved	15	15	30
as unimproved	6	10	16
as not insane	i		ĩ
Deaths	16	10	26
Patients remaining Sept. 30, 1881	229	284	463
Viz., supported as State patients	95	86	181
as town patients	104	120	224
as private patients	30	28	58
Number of different persons within the year	278	2823	564
admitted	57	63	120
recovered	7	13	20
Daily average number of patients	228.01	223.78	451.79

The number of persons admitted in the course of the year was one hundred and twenty, of whom fifty-seven were men and sixty-three women; but three of these persons, all of them women, were admitted twice each. As every person is considered a new patient, or case, at every admission, those three women counted as six patients or cases. Consequently the number of patients admitted was one hundred and twenty-three, or three more than that of persons.

Only one of the three women admitted twice each was discharged recovered on the first of those admissions. She returned to the hospital after an absence of more than nine months.

Of the one hundred and twenty persons admitted, twentysix, or a little more than one-fifth of the whole, have been inmates of the hospital more than once. Six men and fifteen women, a total of twenty-one, have been admitted twice each; one man and two women three times each; one man four times, and one man eight times.

Of the twenty-one who have been received twice each, only seven, all of them women, were discharged as recovered on their first admission. Eight were discharged as improved, and six as unimproved.

Of the three who have been here three times each, the man was discharged as recovered on his first two admissions. The women were both discharged as unimproved on both admissions.

The man who was received for the fourth time had been discharged as recovered on his first admission, improved on the second, and unimproved on the third. He has been treated at two other hospitals within the State.

The man received the eighth time had been discharged as recovered four times, and improved three times.

Thus, of persons who in any foregoing year had left the hospital with a record of recovery, ten returned to it within the official year just closed; and those ten persons had been discharged as recovered a total of thirteen times.

The number of persons admitted exceeded by five that of the next preceding year; and the number in the house at the end of the official year is larger by seventeen than it was a year ago. The daily average number in the house was a trifle larger than in 1879-80, notwithstanding that no less than nineteen patients were transferred, in the course of the year, to the Springfield Almshouse. All of these facts tend to show that insanity is increasing in the western part of the State, the section from which this hospital derives its patients, as well as to confirm the belief that the time is not very remote at which the people of that section will require more accommodations of the kind than are here to be found.

STATUS OF PATIENTS.

As has already been stated, the number of patients admitted was one hundred and twenty-three. Upon entering the hospital the cost of support of forty of them was defrayed by the State, of sixty-four by cities and towns, and of nineteen by their friends, or from other private sources. In the course of their terms of residence here this cost was transferred from the State to towns in two instances, and from the State to individuals in one instance.

One hundred and six patients either left the hospital or died. Twenty-five of these derived their support from the Commonwealth, sixty-three from cities and towns, and eighteen from individuals.

Of the four hundred and sixty-three patients who were in the hospital at the end of the official year, one hundred and eighty-one were beneficiaries of the State, two hundred and twenty-four were supported by cities and towns, and fiftyeight were private patients.

From the statistics in the Saturday reports sent from the hospital to the Board of Health, Lunacy, and Charity, we derive the weekly average number of patients in each of the three classes mentioned. They are as follows:—

						Males.	Females.	Totals.
State patients			•		•	96.84	83.98	180.82
Town patients						101.63	112.52	214.15
Private patients	•	•	•	•	•	29.73	27.46	57.19

The relative proportion of the numbers of patients in the three classes has varied to a great extent at different periods in the course of the last seventeen years. At the end of the official year 1863-64 there were two hundred and fourteen State patients, forty-five town patients, and seventy private patients. The actual numbers in all the classes increased, but those of State patients far the most rapidly, until two years afterwards, at the close of September, 1866, they were, — of State patients, two hundred and seventy-two; town patients, fifty-two; private patients, eighty-one.

From that time to the present there has been a gradual diminution of numbers in the class of State patients, largely in consequence of alterations in the laws of settlement.

Some fluctuations have occurred in regard to town patients; but, upon the whole, and taken from year to year, there has been a constant, and at times a rapid, augmentation of their number. On Sept. 30, 1869, there were sixty-two; Sept. 30, 1872, ninety-five; Sept. 30, 1876, one hundred and forty-six; Sept. 30, 1879, one hundred and eighty-four; and Sept. 30, 1880, two hundred and five.

The number of private patients increased from year to year, until it attained its maximum in 1871. At the close of April of that year the numbers in all the classes were, - of State patients, two hundred and thirty-nine; town patients, seventy-four; private patients, one hundred and twenty-two. From the opening of the hospital up to the time just mentioned, a period of thirteen years, private patients had been received from all quarters, whether within or without the State; and of the one hundred and twenty-two of this class at that time present, more than seventy came from places beyond the borders of the Commonwealth. The pressure for admission by residents of the State had now become so great that it was determined thenceforth to admit no others. This determination has been strictly adhered to, and since the 4th of October, 1871, no non-resident of Massachusetts has been received. Not this alone, but many of the patients from other States were removed by direction of the Trustees, in order the more rapidly to make room for our own citizens. Under these influences the number of private patients diminished until it reached fifty, its lowest point, in August, 1878. Since that time it has slightly increased from year to year.

RECOVERIES.

Among the patients who left the hospital within the year, there were seven men and thirteen woman, a total of twenty, who — according to our standard of mental health, and our judgment in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncracy, education, and habits — were properly considered as recovered. No patient was discharged as recovered more than once in the course of the year. Of the twenty recoveries, two of men

and one of women were of persons who had at some former time been inmates of this institution. One of the men had been here three times, and was discharged as recovered every time; the other had been here once, and was discharged as recovered. The woman had previously been admitted twice, and was discharged as recovered on each admission. The former recoveries of the three persons were six; the total of their recoveries since this their last discharge is ten. The seventeen other persons—five men and twelve women—who recovered, had never before been inmates of this institution.

Three of the persons, who upon leaving the hospital were recorded as much improved, would probably have fully recovered had they remained here a sufficient length of time.

Of the twenty persons discharged recovered, four were supported by the State, eleven by cities and towns, and one by private funds.

Both the number and the relative proportion of recoveries was small, - a fact which must be attributed to the material upon which the medical officers were required to work. As, in the olden time, it was found inconvenient to make brick without straw, so, now, it is not easy to effect a restoration from disease when that disease has been permitted to become permanently fixed before it is subjected to a curative process. The proportion of incurables received at the hospital appears to be constantly increasing in the progress of years. large has it now become, that one wonders where such a mass of chronic mental disease, in its confirmed condition and its most aggravated forms, can come from, - such a number of broken-down constitutions, so much of imbecility, of dementia, of paralysis, and of long-existent mania. But light upon this subject is near its dawn. The forthcoming national census will reveal the unwelcome fact that the number of the insane within the United States is nearly twice as large as has generally been supposed. From thirty to forty years ago the estimated proportional number in Massachusetts was one to every thousand of the population. It is now known that there are nearly three to every thousand. It is from this great reserve of mental disorder that the hospitals are, in large measure, drawing their supplies of patients

They are kept at their homes, or in other receptacles, so long as they can be cared for without an overburden of work or of annoyance, or so long as that care is unattended by personal danger, and then a refuge is found, chiefly in the institutions provided by the State.

DEATHS.

Twenty-six patients died in the course of the year. Sixteen of them were men, and ten women. Judged by the extent of their fatility during this period, two diseases stand side by side, with four deaths each, as the most prominent destroyers of life. One of them is that peculiar form of cerebral disorder, which was never mentioned in a report of an American hospital for the insane until within the last forty years, the paralysie générale of the French, called paralysis of the insane, or paresis, by the English and the Americans; the other is that gradual destruction of the vital forces and slow wasting away of the body, without acute or severe disease, which in medical language is named marasmus, - a disorder which, with the single exception of consumption, is, in institutions for the insane, the cause of greater mortality than any other. Consumption, often the foremost, is this year the third on the mortuary list, with three deaths. patients died of paralysis, two of epilepsy, and two by suicide. There were ten more deaths, no two of which were the result of any one disease. The detail of their causes may be found in one of the tables in the appendix. It still remains to be a fact—a fact that approaches the marvellous—that no patient has ever died in the hospital of typhoid fever.

The only important unpleasant occurrences of the year were two deaths by self-destruction. In one of them, a man effected his purpose by strangulation; and in the other, a woman, by hanging. In both instances the medical examiner of this district was called to take cognizance of the matter. The hospital has now been in operation twenty-three years, and the number of deaths by suicide is sixteen, ten of which were of men, and six of women. Eight of those of men occurred within the first nine years of the history of the institution. During the time between the 8th of November, 1869, and the 15th of November, 1880, a period of more than eleven years, no casualty of this kind took place among the men.

Of the whole number of deaths by suicide, ten were within the first eleven years of the operations of the hospital, four within the last eleven years, and one in the middle, or twelfth year. But, as mentioned last year, the average number of patients in the hospital was larger by more than a hundred during the period last mentioned than during the period first mentioned.

Once more, as in a large majority of the preceding years, we have evidence of the greater mortality of men than of women among the insane. The sixteen deaths of men constitute a percentage of 5.70 in relation to the whole number of patients of that sex in the course of the year; but the percentage of the ten deaths of women, in like relation to their sex, was only 3.52. If, instead of the whole number of patients of either sex admitted, the daily average number in the house be taken as one of the terms of the comparison, the deaths of men were 7.01 per cent, while those of women were only 4.46.

Of the patients who died, seven were supported by the State, twelve by cities and towns, and seven by individuals or by private families.

The annual statistical history of the mortality in the hospital during the whole term of its existence is contained in the following table:—

Deaths and their Ratios from Sept. 30, 1858, to Oct. 1, 1881.

OFFICIAL	Whole No. of	Daily Average No. of					Per Cent on
YEAR.	Patients.	Patients.	Men.	Women.	Total.	of Patients treated.	Daily Average No, of Patients
1858-59,	813	229.55	7	12	19	6.07	8.27
1859-60,	398	255.96	ġ	18	27	6.78	10.54
1860-61.	434	314.26	15	15	30	6.91	9.54
1861-62,	442	813.80	9	10	19	4.29	6.05
1862-63,	470	855.28	19	7	26	5.53	7.81
1863-64,	475	857.63	17	80	47	9.89	13.14
1864-65,	469	342.40	17	24	41	8.76	11.97
1865-66,	488	876.35	18	13	31	6.35	8.23
1866-67,	543	401.08	23	24	47	8.65	11.71
1867-68,	565	413.41	25	18	43	7.61	10.40
1868-69,	590	405.10	13	12	25	4.23	6.17
1869-70,	604	408.83	22	11	33	5.46	8.07
1870-71,	616	421.90	16	12	28	4.54	6.64
1871-72,	619	428.72	19	18	37	5.97	8.63
1872-73,	614	437.23	13	8	21	8.42	4.80
1873-74.	626	469.54	14	11	25	8.99	5.32
1874-75,	629	475.35	23	18	41	6.52	8.62
1875-76,	629	474.21	18	19	87	5.88	7.80
1876-77,	603	476.16	21	21	42	6.96	8.82
1877-78,	551	442.43	14	9	23	4.17	5 19
1878-79,	535	436.73	14	9	23	4.20	5.27
1879-80,	559	450.51	17	12	29	5.19	6.44
1880-81,	569	451.79	16	10	26	4.57	5.75

The proportion of deaths during the year just closed was small. As calculated upon the whole number of patients treated, it was, as will be seen in the table, 4.57 per cent; and upon the daily average number in the house, 5.75 per cent. As calculated in the former way, there have been but eight of the twenty-three years of the existence of the hospital in which the proportion was smaller; and as in the latter, which statisticians regard as the more correct way, there have been but four.

Perhaps the most striking feature of the table, if examined as a whole, is the reduced mortality in the last half of the time in which the institution has been in operation, as compared with that of the first half. Not only is it lower, but it is more equable throughout the successive years of its period.

The ratio of deaths in the table has been calculated in the customary method, upon the number of patients treated. In one point of view there is a fallacy in the results of this method which, like other fallacies, conveys an erroneous

impression. This is especially true when the results of a series of years are under consideration. Under these circumstances the number of patients is always greater than the number of persons. By repeated admissions one person may make several patients. If, consequently, the percentage of deaths be calculated on the number of patients, it will always be smaller than the actual proportion of persons who have died. If, for example, one person should be admitted to a hospital ten times, and die there on his last admission, his statistical history would be one person, ten patients, one death; and the proportion of that death, calculated upon the whole number (10) of patients, would be only ten per cent, while if calculated upon the number (1) of persons it is 100 per cent.

In the statistical history of the Worcester Hospital, which has for several years been in the course of preparation, it has been shown that, prior to the close of the official year 1879-80, 12,401 patients had been admitted. The number of deaths had been 1,709, which is 13.78 per cent of the number of patients. But the actual number of persons, or individuals, admitted was only 9,246. Of this number, as before stated, 1,709 had died. This is 18.48 per cent, or the true proportion. The annual mortality at the hospital had probably not been over six or seven per cent.

In the course of the past year only one patient has been removed from the hospital, at the apparent approach of death, in order that he might die at home. In this instance, as in all other similar cases here, the decision in regard to removal was left entirely to the friends of the patient, without advice, either for or against it, from the medical officers of the institution.

WORSHIP AND ENTERTAINMENT.

In the course of the seventeen years of my connection with the hospital, there has been no Sabbath upon which the patients have not assembled for divine worship in the chapel; and in every instance the services have been conducted by a minister of the gospel having no official connection with the institution. These have mostly been pastors of the several denominational churches in Northampton; but not infrequently they have come from other towns in the neighbor-

hood, occasionally from remote parts of the State, and These services are usually atsometimes from other States. tended by about one-half of the patients. Some years ago special efforts were made to increase the attendance, and the proportion of patients present was carried up to from twothirds to three-fourths of the whole number in the house. But it was found that, under the circumstances, the liability to disturbance by talking, by eccentric conduct, or by outbreaks of excitement among the more demonstrative patients, was so greatly increased that the propriety and usefulness of the endeavor was more than doubted. The practice was consequently discontinued. With but one-half the inmates present, the most frequent causes of disturbance are the paroxysims, or "fits," of epileptics. These occurrences are extremely unpleasant; and consequently furnish one of the many arguments in favor of separate institutions for that class of the insane from whom they arise.

A list of all the exercises in the chapel, in the course of the year, both on the Sabbath and on secular evenings, is placed below:—

1.	Exercises on the Sabbath, -			
	Divine worship		52	days
2.	EXERCISES ON SECULAR DAYS, -			
	In memory of President Garfield		1	day
3.	Exercises on Secular Evenings, —			
	(a) Readings, opening and closing with sacred music:—			
	The Bible	•	24	days
	The Bible, and selections of prose		11	66
	The Bible, and selections of poetry		27	"
	Miscellaneous selections of prose		71	"
	Miscellaneous selections of poetry		69	"
	Miscellaneous selections of prose and poetry		27	"
	(b) Lectures, opening and closing with sacred music:—			
	1. Description of the Sandwich Islands .		1	day
	2. California and its products		1	"
	3. The people of England and of France contrast	ted	, 2	days
	4. English and American dialects and idioms		1	
	5. Origin and signification of English surnames		2	days
	6. Origin and signification of French surnames		1	day
	7. Origin and signification of German surnames		1	"
	8. Signification of Christian names		1	"
	9. Origin and signification of County names		1	"
	10. The English Mail-coach forty years ago .		1	"
	11. The French Diligence forty years ago .	•	1	44
	11. Ind 110hon 2 mgchoo lorey jeans ago	•	-	

(c) Other entertainments	: —								
Pictures shown w		•		7	days				
Concerts of vocal	and	l instr	umer	ital m	usic	•		5	"
Recitations							•	2	44
Exhibition of leg	erde	main				•		1	day
(d) Social gatherings: -	-								•
Quadrille parties		•				•		19	days
No assembly	•	•	•	•	•	•	•	86	"
Total			_		_			885	dava

As shown by this table, there was an assembly of the patients for either worship, instruction, entertainment, or amusement upon three hundred and twenty-nine days of the year. Among the thirty-six exceptional days were those upon which the institution was visited respectively by the Trustees; the Board of Health, Lunacy, and Charity; the Legislative Committee on Charitable Institutions, and the Governor and Council.

We are indebted to Dr. A. M. Shew, of the Connecticut Hospital for the Insane, for the lecture upon the Sandwich Islands; to Mrs. Dall, of Washington, for that upon California; to the choir of the Edwards Church, in Northampton, for a concert; to Miss Longley and Miss Rice, for three concerts; and to Dr. T. M. Meekins, for the exhibitions of pictures.

FARM.

The season which is now passing away will rank as high, at least, as the average in favorableness to the growth of those productions of the soil which in this latitude contribute the most largely to the subsistence of man and his domestic animals. Of all the ordinary products of a New England vegetable garden we had, as usual, a very liberal supply; and no small quantity is required for the tables of five hundred and twenty persons, which is about the average for the year of the hospital household. Of potatoes, the product of the first planting of the Early Rose was somewhat reduced by the first and only important drouth of the season; but, notwithstanding the ravages of the potato-bug, which upon this farm were greater than in any foregoing year, the later crops were large and of excellent quality. The whole production was about three thousand bushels.

For apples it is the off-year, and consequently no abun-

dance was anticipated, especially so soon after the overwhelming product of the years 1878 and 1880. Still the harvest of them will yield from seventy-five to a hundred barrels suitable for domestic use, and enough of poorer quality to make a dozen barrels of cider. This will enable us to keep up our own supply of vinegar.

Never before was the quantity of hay upon the premises so large. The first growth of grass yielded over 171 tons, and the second and third growths about 42 tons, making an aggregate of 213½ tons.

The following list of products—the quantities of some of which are estimates, because the harvest is yet unfinished—was prepared by the Farmer, Mr. Wright:—

SCHEDULE OF PRODUCTS.

Hay (first growth of home fa	rm),	102 (tons,	at \$ 1	6			\$ 1,632	00
Hay (after-growth of home f								424	00
Hay (first growth, S. Day los								424	00
Hay (second growth, S. Day					в			184	00
Hay (South lot), 291 tons, at		-			•	•		468	00
Hay (Clark orchard), 147 to		\$ 16						236	00
Hay (Fowle lot), 23 tons, at					•			44	00
Corn-fodder, dry, 20 tons		•		•			•	100	00
Oat-straw, 7 tons .		•		•				70	00
Corn, 500 bushels .					•			325	00
Potatoes, 3,000 bushels		•		•	•		•	1,800	00
Oats, 200 bushels .								100	00
Broom-seed, 50 bushels		•	•					25	00
Carrots, 200 bushels .	•	,	•			•		60	00
Beets, 1,200 bushels .	•			•		•		480	00
Onions, 300 bushels .		•	•	•	•		•	240	00
Turnips, 500 bushels .				•	•		•	125	00
Parsnips, 25 bushels .		•		•	•		•	12	50
Beans, Lima, in shell, 140}	bu sh e	els		•	•		•	175	62
Beans, string, 36 bushels	•	•		•	•	•		45	00
Beans, Lima, dry, 20 bushel	s		•	•			•	60	00
Pease, green, in pod, 79 bush	hels	•	•			•		118	50
Sweet corn, green, in ear, 19	93 bu	shels		•				193	00
Tomatos, 111 bushels .		•	:			•		111	00
Lettuce, 94 bushels .		•	•		•		•	56	40
Cucumbers, 941 bushels	•		•	•				94	50
Squashes, summer, 931 bush	els	•	•	•		•		116	87
Squashes, winter, 6 tons	•	•	•	•	•	•	•	240	00
Amount carried forward		•		•	•	•	•	\$7,960	89

Amount brought forward								\$ 7,960	89
Melons, 7,694 pounds .	•							115	11
Asparagus, 291 bushels								88	50
Pie-plant, 19 bushels .		•		•		•	•	19	00
Beet-greens, 66 bushels	•							33	00
Cabbages, 2,500 heads .			•					100	00
Currants, red, 8 bushels								82	00
Apples, 86 barrels .			•	•	•	•		172	00
Pears, 27 bushels		•	•	•	•			40	50
Quinces, 8 bushels .		•	•	•		•		6	00
Veal, raised here, 186 pound	ls		•	•				22	82
Pork, 15,610 pounds .		•		. •			•	1,092	70
Pigs sold, 120		•			•	•	•	831	00
Pigs, roasting	•	•	•	•	•	•		5	00
Turkeys, 442 pounds .		•	٠,	•	•	•		86	05
Chickens, 32 pounds .	•	•	•	•		•	•	5	76
Heads and plucks .	•	•	•	•	•	•		21	00
Eggs, 133 dozen .	•	•	•	•	•	•		41	50
Milk, grass-fed, 24,069 quan	ts	•	•	•	•	•	•	1,203	45
Cider, 12 barrels	•	•	•	•	•	•		24	00
Broom-brush, 400 pounds	•	•	•	•	•	•	•	24	00
Calf-skins	•	•	•	•	•	•	•	3	00
Young calves sold .	•	•	•	•	•	•	•	35	00
Wood sold	•	•	•			•	•	115	00
								A11 570	

\$11,576 28

Inasmuch as a large part of the milk is produced from the hay, grain, and roots raised upon the farm, and the value of which is included in the foregoing list, we only report under appraisal one-quarter of the actual production, supposing that to be the product of grass. The whole quantity was 24,069 gallons. The list gives that number of quarts.

Thirty-five hogs, which were raised and fattened on the premises, were slaughtered within the official year. The weight of their carcasses, individually, was as followe: 369, 329, 516, 380, 440, 443, 534, 500, 302, 500, 496, 520, 450, 500, 336, 500, 481, 544, 400, 500, 450, 425, 355, 591, 743, 387, 230, 368, 411, 400, 400, 438, 480, 532, 360. The total weight was 15,610 pounds, making the largest annual product of pork in the history of the hospital farm. The mean or average weight is 446 pounds; the average weight of the largest five, 588 pounds; and that of the largest ten, 548 pounds.

There are now on the farm 9 horses, 8 oxen, 1 bull, 30 cows, 1 heifer, 104 swine, and some domestic fowls.

How the Hospital is Supported.

The following financial exposition is the same that was published in the annual report for 1879-80, excepting such modifications as were required to accurately exhibit the facts as they exist at the present time.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the funeral expenses of State patients who die in the hospital, and whose remains are not removed for burial. The receipts from the last-mentioned source, during the past year, were sixty dollars.

For the entire support of State patients, including clothing and all loss from breakage and other kinds of destruction, the hospital received three dollars and fifty cents each per week from the treasury of the Commonwealth from April 1, 1870, to April 1, 1879. For one year after the latter date it received but three dollars each per week; and since April 1, 1880, it has received three dollars and twenty-five cents each per week. This is the compensation fixed by statute law. Two-fifths of the inmates now belong to this class. During the past year the weekly average of them was 39.99 per cent of the whole.

For town patients it has received, and now receives, from the treasuries of the towns respectively in which those patients have legal settlements, the same sum per week as from the State treasury for State patients; but the towns clothe their patients, and remunerate the hospital for damages done by them. Nearly one-half of the inmates are now in this class. The weekly average of them for the year was 47.36 per cent.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1881, was \$5.018 each per week. Clothing and damages are extra charges. The weekly average of these patients, during the past year, was 12.64 per cent, or about one-eighth of the whole.

The average weekly pay per capita received by the hospital for all its patients—State, town, and private—in the course of the year, is \$3.501. Such are the pecuniary resources of the institution. We turn to the results of

THE FINANCE OF THE LAST SIXTEEN YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its favor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of five thousand dollars, in two appropriations, for specific purposes,—one of two thousand, and the other of three thousand dollars.

As an offset to the five thousand dollars bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and forty-nine acres, the total cost of which was \$25,590. The State then has, in this way alone, been overpaid for its bonus in the sum of \$20,590.

The amount paid by the hospital for repairs and improvements in the course of the sixteen years, from Sept. 30, 1865, to Sept. 30, 1881, is \$191,722.38.

The surplus of cash assets now on hand, including the reserve fund, is \$30,970.21, or \$30,668.17 larger than it was on the 80th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing, now on hand, are estimated to have cost \$15,456.20. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$12,956.20.

The value of household furniture in the hospital is, at a low estimate, at least ten thousand dollars greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called eight thousand dollars. Collecting these several sums, the account of debit of the Commonwealth to the hospital appears to be as follows:—

Excess of cost of land over direct bonus					\$20,590 00
Repairs and improvements			•		191,722 38
Excess of present cash assets					30,668 17
Increase of provisions and supplies .			•	•	12,956 20
Increase of inrniture	•	•	•	•	8,000 00
					\$263,936 75

The necessary current repairs of the buildings may be estimated at three thousand dollars annually. Deducting this

sum for each of the sixteen years since Sept. 80, 1865, a total of \$48,000, there is a remainder of \$215,936.75. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

STUDIES RELATIVE TO THE CURABILITY OF INSANITY.

In once more inviting the attention of readers to the subject of the Curability of Insanity, I do not propose to inflict upon them a long discussion of the subject. The arguments already advanced in proof of the allegation that mental disorders are far less susceptible of cure than has generally heretofore been believed, ought to be, as to a great extent they have been, sufficient for their purpose. There is little necessity of additional evidence, either cumulative or other. Not only is the truth of the seven propositions derived as "conclusions" from my discussion of the subject five years ago becoming more and more widely recognized and acknowledged, both by the medical profession and by interested laymen, but an increasing number of the superintendents of hospitals and asylums so explain their statistics of recoveries as to give further proofs of that truth. Many of these might be quoted; but, at this point, two may be allowed to suffice.

In his report for 1880 of the Lancaster (Eng.) County Lunatic Asylum, Dr. David M. Cassidy records 159 patients as discharged recovered in the course of the year. In 88 of them the recoveries were from a first attack, while 66 were patients who had previously recovered from earlier attacks.

"Such recoveries," he writes, "as those in the latter category, must of course be taken for what they are worth. They are, in fact, relapsing cases, and nearly all will probably become again, more or less frequently, asylum inmates. Nor should it be concealed that even among the eighty-eight primary recoveries many will probably relapse, and some will die insane. This suggests forcibly the consideration that the care and alleviation of the condition of the general body of the insane is at least as important a function of asylums as is the so-called 'cure' of a small percentage of cases, few of

whom remain permanently sane. It also suggests the futility of making artificial distinctions between the curable and the incurable insane."

Dr. G. Mackenzie Bacon, of the Cambridgeshire, Isle of Ely, and Borough of Cambridge Pauper Lunatic Asylum, in the report of that institution for 1880, after announcing his intention to "tabulate all the re-admissions" of that institution from the time of its opening, proceeds as follows:—

"I feel it is only by such a method that we can arrive at the knowledge of what cases are really cured, and that it is important that asylum superintendents should know how many patients recover, in the sense of being restored to health for at least a considerable period, and not merely how soon a recovered patient returns to the same asylum, to again go through the farce of a recovery, and be re-admitted perhaps in a week or a month."

Results, in 1879-80 at the Massachusetts State Hospitals.— The adoption last year by all the State hospitals for the insane in Massachusetts of the new series of statistical tables prepared by the Board of Health, Lunacy, and Charity, has given us an advantage never before enjoyed. It has enabled us to show very nearly, if not positively, just what was done by those institutions in the course of the official year 1879-80 towards the restoration of the insane and the diminution of their number within the Commonwealth.

At the four State hospitals, at Worcester, Taunton, Northampton, and Danvers, in the course of the year ending with Sept. 30, 1880, the number of persons admitted was 1,092,—persons, or individuals, be it understood, because it not infrequently happens that one and the same person is admitted more than once in the course of a year. Out of this number of persons, and those who were in the said hospitals at the beginning of the year, the number of persons discharged recovered was 283. This makes the recoveries, calculated on the admissions—the method which approximates most nearly the truth—equal to 25.91 per cent, or a small fraction more than one-fourth of the whole.

Such, then, are the results for one year at our curative State establishments. I have here stated them in the way that similar results have always, prior to the year 1880, been reported at the institutions for the insane throughout the United States. Even as so reported, giving to them all the

advantage derived from a broad, general statement, with no examination into the detail of modifying facts and conditions, they yield no evidence of a great degree of curability of the insane. The curable three-fourths of former faith dwindles very nearly to one-fourth in absolute practice.

The hospital at Danvers, the newest of the four institutions mentioned, and situated nearest the populous centres of the State, received nearly all of the recent cases from Boston during the past year. It probably also received all which were committed from Lynn, Salem, Lowell, and Lawrence. But as that hospital has been only a short time in operation, I disregard it in the showing that I am now about to make, and take the three other hospitals, which have been in operation different periods, varying from twenty-three to forty-eight years.

Those three older hospitals, at Worcester, Taunton, and Northampton, admitted during the official year 1879-80, 521 persons. They discharged recovered 118 persons, making a percentage of recoveries of 22.64, a noteworthy fraction less than one-fourth of the number admitted.

But let us look a little farther. The three hospitals discharged 118 persons recovered; but they admitted 55 persons whom they had previously discharged recovered. Consequently the actual gain, in the course of the year, of recovered persons in the community was only 118 minus 55, which is 63. This is only 12.09 per cent, or less than one-eighth of the number of persons admitted. It is an average of 21 gained recoveries at each of three large hospitals, the average number of the patients of which was, for the year, equal to 503 for each.

A fact yet unmentioned gives, at first view, a still more discouraging aspect to the case. The 55 persons re-admitted after previous recovery had been discharged recovered, not alone once each, making 55 recoveries, but a total of 115 times. The public had been told in the reports of 115 recoveries of those 55 persons. Hence, if recoveries, and not persons, be considered, the three hospitals issued 118; but they took back 115 which had been previously issued, leaving in the general population a gain of only three, or an average of one for each hospital.

It is not improbable, however, that the excess of recoveries

(115) over that of persons (55) re-admitted was counterbalanced by a similar excess of recoveries over that of persons (118) discharged. For example, if one of the 55 persons re-admitted had previously been discharged recovered five times, there may have been, among the 118 discharged recovered, one who had previously been discharged recovered an equal number of times.

The statistics just given in aggregate for the three institutions were specifically, for each one of them, as follows:—

At the Worcester Hospital, the oldest of the three, although its present building is the newest, the number of persons admitted was 222. The number discharged recovered was 41, which is 18.46 per cent, or less than one-fifth of the admissions. But among the admissions were 25 persons whom it had previously discharged recovered. Hence the actual gain of recovered persons outside of the hospital was only (41 minus 25) 16, or 7.2 per cent of the number admitted.

The 25 persons re-admitted had been discharged recovered a total of 58 times.

At the Taunton Hospital, 184 persons were admitted and 49 discharged recovered, a percentage of 26.62. Of those admitted, 19 had previously been discharged recovered, so that the gain of recovered persons in the general population was only (49 minus 19) 30, or 16.3 per cent of the admissions.

The 19 persons re-admitted had been discharged recovered 35 times.

At the Northampton Hospital, the number admitted was 115. The number discharged recovered was 28, equal to 25.22 per cent. But of the persons admitted there were 11 who had previously been discharged recovered. The gain of recovered persons in the community was, therefore, only (28 minus 11) 17, or 14.78 per cent of the number admitted.

The 11 persons re-admitted had been discharged recovered a total of 22 times.

It is believed that from this exposition it will be apparent that the method still almost universally prevalent of reporting recoveries is, except in a technical or medical sense, very fallacious and deceptive; and that, until some other method, similar to the new one in Massachusetts, be adopted, those statistics will be worth next to nothing in the study of the problems of social science.

At the Danvers Hospital, the number of persons admitted in the official year was 571. The number discharged recovered was 165, or 28.89 per cent.

The proportion of recent cases received at that institution . was unquestionably, and for obvious reasons, larger than at either of the other three.

That hospital had been in operation less than eighteen months at the beginning of the official year in question; hence it could not be expected that, among the persons admitted, there should be many who had previously been discharged from it recovered. And yet there were some such re-admissions—the report does not state how many; but it was of so many persons that their total of recoveries was 18.

A Glance at Great Britain.—Having shown the results at the State hospitals of Massachusetts, perhaps it may be permitted to extend our observation to some of the similar institutions abroad, for the purpose of further illustrating the subject, as well as showing the advantages of our recently adopted method of reporting recoveries.

At the British asylums the method of reporting the statistics has always been essentially the same as it is in the United States. We, indeed, followed their example. But it has heretofore been my impression that the proportion of patients re-admitted, after having been discharged recovered, was much smaller there than in this country. I have supposed that the British patients remained longer in the hospitals than do the American, and that thus their recoveries were so confirmed that relapses, or subsequent attacks, were comparatively infrequent. From information recently received, I infer that, at least to a certain extent, I was mistaken, and that there is no very great difference in these respects between the two countries.

Dr. Clouston, of the Royal Edinburgh (Morningside) Asylum, in his report for 1880, has introduced tables by which the same light is thrown upon his statistics of recoveries as upon those of the Massachusetts institutions by the new and recently adopted method of reporting, with the exception that he does not clearly discriminate between cases (or patients) and persons.

The admissions at Morningside, in 1880, were 347. Of these patients, the number suffering from the

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First attack of the	he d	lisease	was		•	•	231
Second attack							58
Third attack							24
Had had several	att	acks					26
Congenital		_					8

Hence it appears that, of the 347, no less than 108 (58 plus 24 plus 26), or nearly one-third of the whole, were readmitted after recovery from one or more former attacks.

On the supposition that the word "several" means three (it probably, as used above, means more), those 108 patients had already been discharged "recovered" a total of 184 times.

So much for the patients admitted.

The number of patients discharged, recovered, was 165, which is 47.55 per cent, as calculated on the admissions. Of these 165, there were who

Recovered for	the fi	rst ti	me	•				97 `
Had recovered	in fo	rmer	years		•			63
Recovered mor	re tha	ao a	e in 1	1880	•	•	•	5
Total								165

At the close of the year no less than nine (9) of these had already been brought back to the asylum, and still remained there or had been removed unrecovered.

If the figures in these two tables represent persons, we derive from them the following result:—

The asylum discharged, recovered, 165; but it took back, of persons who had formerly been dischared recovered, 108. Consequently the actual gain of recovered persons in the general population was only 57 (165 minus 108). This is only 16.42 per cent of the admissions.

The movement of the population at the Morningside Asylum is very rapid. Many of the patients apparently remain in the institution but a comparatively short time. For these reasons it is believed that the proportion of patients returning to it after having been discharged recovered is larger than at most of the British asylums.

In his report for 1880 of the Derbyshire (England) County Lunatic Asylum, Dr. J. Murray Lindsay states that in 20 per cent of the admissions "there had been previous attacks of insanity." At the Richmond District Asylum, Dublin, Ireland, in 1880, the admissions were 420, of which 65, or 15.47 per cent, were "relapsed cases." The number discharged recovered was 167; but the gain of recovered persons in the general population was only 102 (167 minus 65).

The British Medico-Psychological Association. — The most striking evidence of progressive thought relative to the general subject under consideration is the fact that, at the annual meeting of the British Medico-Psychological Association, which was held in London in August last, the statistical committee of that society recommended for adoption some new tables, as well as alterations in some of those already in use, so modifying the series, as a whole, that the statistics of the asylums can be reported with essentially the same detail and the same perspicuity in regard to recoveries as is found in the new tables of the institutions in Massachusetts.

After a brief discussion, it was decided to postpone for one year the question of their adoption, for the purpose of giving the members an opportunity to study them and to discuss their merits at the quarterly meetings. But there can hardly be a doubt as to the result. The proposed alterations will be adopted. In the present state of things - when, in consequence of the existence of various organizations for the promotion of the objects of social science, the call, outside of the profession, for information in regard to insanity is tenfold greater than it was forty years ago - the members of the British association cannot afford to refuse to display their statistics in such manner as will render them valuable to the members of those organizations. The present technical truthfulness of those statistics must be expanded into an absolute truthfulness in regard to the relation between the disease and individuals, or the most important part of the statistics themselves will soon become entirely, as they even now are essentially, valueless. Dr. Clouston is not going to recede from the position gained by the step in advance taken at the time of making the report just passed under review. a position in which he could show not alone what his institution had accomplished during the year in relation to disease, but also to what extent its beneficial influence had affected his fellow-men. There are many others among his colleagues in the specialty in England and Scotland who are even now

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ready to follow his example. The rest will doubtless mostly be ready at the expiration of the appointed year. Let them remember that, no less than forty years ago, a reformation in the statistics of insanity was called for by an Englishman whose keen and comprehensive intellect and whose soundness of judgment were second to those of no one of his countrymen who have written upon the subject: I allude to the late Samuel Tuke. In the thoughtful and excellent article used as an introduction to his translation of Dr. Maximilian Jacobi's treatise on the construction and management of institutions for the insane, he wrote as follows:—

"The whole subject of the mode of reporting the results of our institutions for the insane calls loudly for attention, if we would arrive at any useful statistical comparisons as to the effect of treatment and other circumstances on the health of the patients, and in regard to the cure of this greatest of all human maladies. The subject would not be unworthy of a special consultation amongst the professional men who are devoted to this department of the medical art."

It appears to me, from the very wording of this extract, that its author had in view the specific changes—perhaps with others—which it is intended to accomplish by the adoption of the proposition now before the Medico-Psychological Association. Shall his suggestions be permitted to lie under the dust and ashes of a half-century before they are carried into effect?

Old but valuable German Statistics.—At the Siegburg Asylum, in Rhenish Prussia, an institution which at that time was under the superintendence of Dr. Maximilian Jacobi, the statistics of recoveries from Jan. 1, 1825, to Dec. 31, 1845, a period of twenty-one years, were as follows:—

								Men.	Women.	Total.
Whole number re	covere	d.	•	•	•			377	284	661
Living at the end	of the	perio	d, a	nd h	ave ha	d no	re-			
lapse .		•						169	153	322
Relapsed, and rec	overed	l agair	ı at	the .	Asylur	n.		79	48	127
Relapsed and not	yet cu	ıred		•	•			5	6	11
Relapsed and bec	ome in	icurab	le					34	30	64
Relapsed and die	d insaı	ne e						39	18	57
Died without a re	lapse	•			•			48	25	68
Not heard from	-	•						8	4	12

The number of patients admitted in the course of the period is not given, and consequently the percentage of recoveries cannot be obtained. The statistics are valuable chiefly for the purpose of ascertaining to what extent the recoveries were permanent.

At the time of the close of the twenty-one years, 259 of the 661 persons had "relapsed," or, as it is generally stated in this country, had had a second attack. This is equivalent to 89.1 per cent, or a slight fraction less than two-fifths of the whole. But these are not final results. Within the ten years next following the close of the period the number of relapses would be large, especially among the patients who recovered in the last half of the period. If about two-fifths of the whole relapsed within the period, it appears perhaps more than probable that one-fifth (or half as many more) would relapse afterwards. Supposing this estimate to be accurate, the whole number of persons relapsed would be equal to three-fifths of the whole number of persons recovered. This corresponds with Dr. Thurnam's well-known formula, derived from his investigation of the subsequent history of patients recovered at the York Retreat.

In regard to the proportion of the persons recovered who would ultimately die insane, it will be perceived that, at the close of the period, it was still too early to furnish the data for a very accurate estimate. Something, however, in that direction may be done. Already the number who had relapsed and died insane was 57. The number who had relapsed and become incurable, and who would consequently die insane, was 64. This gives a total of 121, or a little less than onefifth of the whole, whose deaths, while insane, were assured. According to the above-mentioned formula, two-fifths of the whole should die insane. Hence we must find a little over one-fifth, or in actual numbers 143, more who would die in-These must be looked for (1) in the 322 who had not relapsed, but many of whom undoubtedly would relapse; (2) in the 127 who had relapsed and recovered again, and, judging by what we know in regard to the liability to repeated relapses, a very large proportion of whom would relapse again; and (3) in the 11 who had relapsed, and were not yet cured. Of these 460 persons, it would not be surprising if 143 should die insane.

An Echo from the Antipodes.—There are two lunatic asylums in South Australia. They are under the general supervision of a board of visitors, of which Dr. Alexander S. Paterson is chairman. The report for 1880 of this Board, signed by the chairman as colonial surgeon, is before me. It deals with the subject of recoveries with a commendable extent of detail, although it fails to discriminate between persons and cases, and to give the number of attacks and of recoveries of those patients who have been re-admitted after recovery.

At the two asylums, Adelaide and Parkside, the aggregate number of admissions in 1880 was 223. The number of patients discharged recovered was 90, which is equal to 40.85 per cent. But, of the patients admitted, there were 35 who had previously been discharged recovered. The two institutions gave to the people 90 recoveries; but they received back from the people 35 former recoveries. Therefore, the gain of recoveries among the people was (90 minus 35) only 55. This is 24.76 per cent of the admissions.

Five of the patients re-admitted returned to the hospital within a month from the time at which they were discharged recovered.

As might be expected, in a country so recently settled as South Australia, a large proportion of the recoveries were from cases originating in intemperance. In no less than 25 cases of males, the form of the disorder is called *alcoholismus*. The patients recovered in 24 of them. Eight of these were in the asylum less than a month each; and the average time of treatment of the 24 was only one month and seven days.

Athenian Success. — I now approach a "study" from the consideration of which I would gladly be released; but, in the discussion of this subject, it is proper that all fallacies should be exposed, and all sources of error pointed out. Furthermore, I have been criticised for the assertion, in the pamphlet on the Curability of Insanity, that the medical officers of institutions for the insane are men "with like passions as other men," and therefore the introduction here of any evidence that sustains the truth of the assertion is more than justifiable.

That the reader may enter more intelligently upon the matter, it may be remarked that, in Ohio, the superintend-

ents of the State institutions for the insane are among those persons whose offices are the "spoils" which belong to the victors in politics. The mere statement of this fact is sufficient for the present purpose. Any attempt to present, in detail, the evils consequent upon such a state of things would be irrelevant.

In his report for 1880, of the State Asylum for the Insane at Athens, Ohio, Dr. H. C. Rutter, who had but recently been appointed to the office of superintendent, mentions the discussion of the Curability of Insanity begun in the reports of this hospital; and, after stating that it has been taken up by alienists all over the world," gives the following confirmatory evidence of the truth of one of my "conclusions":—

"It has frequently happened that the same person has been discharged more than once during one year, and that each discharge has been reported as a separate cure. One person in Ohio is reported to have recovered seven times in one year, and while he figured in the annual report as seven 'recoveries,' was actually a patient in one of the wards at the time the report was made out."

After some further remarks he proceeds as follows: —

"It has also been charged that these 'cures' are flexible, and can be increased by the Superintendent whenever occasion arises to prove his superior fitness and qualifications as a specialist. This charge has been made repeatedly, and by many distinguished members of the profession, who have been disgusted with the idle talk about cures made by political superintendents for the purpose of gaining cheap notoriety through the secular press. We have, perhaps, felt this in Ohio to a greater extent than in almost any other State in the Union. To show that these charges are not made without some foundation, and that some reason for the demand that is being pressed for a reform in our asylum statistics does exist, I will quote some interesting cures from the general register of this asylum.

"During the two years previous to May 20, 1880, we find among the cures' the following remarkable cases. I quote from the male register, and presume the female register shows an equal proportion of remarkable cures:—

" Duration	of	insanity	over	50	years	•		•		1
44	"	"	"	20	44			•		6
44	"	44	"	18	44			•		8
66	"	"	"	15	"					8
44	"	44	"	12	44			•		8
44	66	44	66	6	66	•				16
m 1										
Total	OΨ	er six ye	ars		•	•	•	• Digitized by	(32 " 300gle
								Digitized by	-	JOOZIC

Cures.

Thus, in the course of two years, and from the men's department alone, thirty-two cases were discharged as recovered, in no one of which had the disease existed less than six years. In one it had existed fifty years; and the average duration for the whole was more than twelve years. "Four of these," continues the Doctor, "were cases of chronic dementia; four were epileptic, with duration of insanity ranging from seven years to twenty-one years."

No man who has had any considerable experience in a hospital for the insane can fail to instantly perceive the preposterous absurdity of such statistics as these. By a probably low estimate, there are now in the public institutions of Massachusetts not less than fifteen hundred insane persons who might be set at liberty and reported as "cured" or "recovered" with as much propriety as were those thirty-two patients at the Athens Asylum. But by those thirty-two cases, together, undoubtedly, with similar ones from the female department, the Superintendent increased the proportion of his "cures" to 63.50 per cent.

I am still of the opinion that "the medical officers of institutions for the insane can claim no exemption from the common weaknesses of human nature;" that "they are men with like passions as other men," and that the degree of confidence which is to be placed in their statistics depends, to a large extent, upon the temperament and character of the individual from whom they come.

ACKNOWLEDGMENTS.

The hospital is indebted to Dr. Alonzo S. Wallace, of Brookline, New Hampshire, and formerly an assistant physician here, for the gift of a preserved and mounted specimen of the gray eagle. It has been placed in the rotunda. We are also under obligations to several other persons for contributions to the reading-matter for the inmates:—to Miss Florence Austin for eight volumes of Harpers' Family Library, and two illustrated monthly publications; to Miss Julia Clark, of the Northampton Book Club, for several volumes of magazines; to S. E. Bridgman for many copies of religious newspapers; and to the publishers of "The Staaten Zeitung" for two copies, weekly, and the publishers of "The Christian Register" for one copy, weekly, of those periodicals.

The official year closes with the same staff of administrative officers with which it began; but among the subordinate officers there have been two changes: Jeremiah E. Shufelt, who for over sixteen years had occupied the position of Supervisor, and performed its duties with much ability, and Nell Russell, who for more than four years faithfully filled the place of Laundress, have left. I cannot well forbear to commend both of them as the possessors of three qualifications pre-eminent in persons employed in a public institution,—a quiet, bridled tongue, intent attention to their own business, and judicious non-interference with the business of others.

And thus, regardful of the exigencies of the future, we turn our backs upon another cycle of time departed and of duties performed. To you who have been our counsellors, and to all those who, with a single eye to duty, have been engaged with me in bearing the burden of the year, I extend my most cordial thanks.

PLINY EARLE.

OCTOBER 6, 1881.

DIETARY OF THE NORTHAMPTON LUNATIC HOSPITAL.

[There are two bills of fare, the first of which is supplied to the tables of about two hundred persons, and the second to those of somewhat over three hundred.]

BILL OF FARE, No. 1.

Breakfast.

Monday. — Tea, coffee, broiled beefsteak, potatoes, warm rolls ("biscuit"), bread and butter.

Tuesday. — Tea, coffee, fried tripe, potatoes, warm rolls, bread and butter.

Wednesday. — Tea, coffee, broiled mackerel, potatoes, and warm brown (rye and indian) bread.

Thursday. — Tea, coffee, broiled beefsteak, potatoes, warm rolls, bread and butter.

Friday. — Tea, coffee, fried tripe, 1 potatoes, warm rolls, bread and butter.

Saturday. — Tea, coffee, either fried fish-balls or liver, meat hash, hot corn-cake, bread and butter.

Sunday. — Tea, coffee, cold corned beef, potatoes, warm rolls, bread, butter, and fried indian corn pudding.

Dinner.

Monday. — Roast beef, potatoes and one other vegetable, bread, butter, boiled rice with syrup or sugar.

Tuesday. — Vegetable soup, roast or stewed veal,² potatoes and one other vegetable, bread, butter, and baked indian pudding.

Wednesday. — Either fried or baked fresh fish, or boiled mutton, potatoes and one other vegetable, bread, butter, and berry or apple pudding with sauce.

Thursday. — Vegetable soup, corned beef, potatoes and one other vegetable, bread, butter, and boiled suet pudding with syrup.

⁸ In spring, maple syrup is used as sauce for puddings.



¹ Tripe is replaced in winter by sausages, and in spring by fried ham and eggs, except in the season of shad, when that fish is given once each week instead of ham and eggs, and once instead of beefsteak.

² Substituted in winter by fresh pork ribs, roasted.

Friday. — Either boiled or roasted mutton, or stewed or roasted veal, potatoes and one other vegetable, bread, butter, and tapioca pudding or raisin pudding of either rice, bread, or cracker.

Saturday. — Baked beans, corned beef, potatoes and one other vegetable, pickles, bread, butter, and baked bread pudding.

Sunday.—Cold corned beef, potatoes, warm baked beans, pickles, bread, butter, and pies, the kind varying with the season.

Supper.

Monday. — Tea, bread, warm corn-cake, butter, hard gingerbread, and a relish.²

Tuesday. — Tea, white bread, graham bread, butter, soft gingerbread, and a relish in the warm season, substituted by buckwheat-cakes in the cold season.

Wednesday. — Tea, bread, butter, cookies and ginger snaps, and a relish.

Thursday. — Tea, bread, butter, pie (the kind varying with the season), and cheese.

Friday. - Tea, bread, butter, cake (the kind varying), and a relish.

Saturday. — Tea, bread, butter, doughnuts, and cheese.

Sunday. — Tea, bread, butter, cookies and ginger snaps, and blancmange, or corn-starch.

Extra. — In the winter and spring months hulled corn at supper, once in two weeks, on Saturdays.

BILL OF FARE, No. 2.

Breakfast.

Monday. - Coffee, cold corned beef, potatoes, and bread.

Tuesday. — Coffee, cold roast beef, potatoes, and bread.

Wednesday. — Coffee, meat stew, potatoes, and warm rye and indian corn brown bread.

Thursday. — Coffee, picked codfish cooked in milk, potatoes, and bread.

Friday. — Coffee, cold corn beef or meat stew, potatoes, and bread.

Saturday. — Coffee, hash (either of meat or fish), and bread.

Sunday. - Coffee, cold baked beans, potatoes, and bread.

Butter is used in two halls in the morning.

Dinner.

Monday. — Roast beef, potatoes and one other vegetable, boiled hominy with molasses, and bread.

¹ Substituted by stewed oysters in winter and spring, with some kind of roasted meat for those who prefer it.

² This term, used for the want of a better, includes dried beef, berries, baked apples, apple-sauce, and canned fruits, all of which are supplied, and each according to the season.

8 Except two months in the spring.

Tuesday. — Vegetable soup, potatoes and one other vegetable, baked indian pudding, and bread.

Wednesday. — Boiled fresh fish with drawn butter sauce, potatoes and one other vegetable, boiled hasty pudding with molasses, and bread.

Thursday. — Vegetable soup, potatoes, cabbage or some other vegetable, boiled rice with molasses, and bread.

Friday. — Boiled codfish with drawn butter sauce, potatoes, beets, or some other vegetable, boiled hasty pudding with molasses, and bread.

Saturday. — Hot baked beans, potatoes, baked indian or bread pudding, pickles, and bread.

Sunday. — Cold corned beef, potatoes, pies (the kind varying with the season), and bread.

Supper.

Monday. - Tea, bread and butter.

Tuesday. — Tea, bread, butter, and soft gingerbread.

Wednesday. — Tea, bread, butter, and some kind of relish.

. Thursday. - Tea, bread and butter.

Friday. — Tea, bread, butter, and soft gingerbread.

Saturday. — Tea, bread and butter.

Sunday. - Tea, bread and butter.

EXTRAS.

In August and September these tables are furnished at supper with either berries, tomatoes, or baked apples, as many as five times a week.

In four halls, sauce, of either fresh or dried apples, is furnished as often as three times a week for the rest of the year.

EXTRAS FOR THE WHOLE HOUSEHOLD.

All persons have roasted turkey at dinner on "Thanksgiving Day," and either turkey or chicken on one other day in the year.

From four to five bushels of green sweet corn, in the ear, is consumed, in its season, daily, with the exception of Sunday.

Tomatoes, cucumbers, and melons are furnished in liberal quantities in their season.

In the spring, cowslips and dandelions are largely used as greens, and horse-radish as a condiment.

During eight months of the year, a barrel of apples are distributed, daily, among the patients.

Beef tea, chicken broth, mutton broth, scalded milk, arrow-root gruel, oatmeal gruel, milk punch, cracked wheat, oatmeal porridge, dry toast, milk toast, toast with dropped egg, and boiled eggs, for invalids and all who are not able to take the regular fare.

¹ Except two months in the spring.

² All baked puddings for the whole household are made with milk.

³ Maple syrup is furnished in place of molasses three or four times in the spring.

APPENDIX.

7

2.* Monthly Admissions, Discharges, and Averages.

	Aı	MISSI	oxe.		ing 1)	GES eaths).	DAILY AVERAGE OF PATIENTS IN THE HOUSE.					
Months.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fo.	Tot			
1880. October	8	5	18	4	6	10	225.93	223.68	449.61			
November		8	9	5	5	10	225.68	228.10	448.78			
December .		2	6	8	-	8	226.32	224.22	450.54			
1881. January	5	1	6	6	12	18	228.13	221.16	449.29			
February .	1	5	9	1	1	2	226.18	216.96	448.14			
March	4	5	9	2	6	8	228.35	219.42	447.77			
April	4	5	9	5	1	6	230.23	218.77	449			
May	. 5	6	11	7	4	11	227.42	222.03	449.45			
June	. 5	8	13	8	4	7	228.07	224.10	452.17			
July	. 5	8	18	8	4	7	229.80	227.68	457.48			
August .	4	9	18	9	7	16	230.54	231.71	462.25			
September.	. 6	6	12	8	5	8	229 40	231.93	461.33			
Total of cases	57	66	123	51	55	106						
Total of person	s, 57	68	120	51	53	104						
Daily average for	•	İ							[
the year .	. -	-	-	-	-	-	228.01	223.78	451.79†			

3. Received on First and Subsequent Admissions.

NUMBE	BOFT	HE AD	MISS	ion.	CAS	RS ADMITT	red.		es Previo	
•					Males.	Females.	Total.	Males.	Females.	Total
First .		•	•		48	49	97	_	-	_
Second		•			6	15	21	-	7	7
Third .		•		•	1	2	3	1	-	1
Fourth		•		•	1	-	1	1	-	1
Eighth		•		•	1	-	1	4	-	. 4
Total	l of c	18e8			57	66	128	6	7	18
Tota	l of p	ersons	•		57	63	120	8	7	10

^{*} For Table No. 1, see the beginning of the Superintendent's report.

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[†] These totals were obtained by a division of the sums of daily residence for the year by 365, the number of days in the year.

4. Ages of Persons admitted for the First Time.

AGES.			AT F	INSANITA.		When Admitted.			
			Males.	Females.	Total.	Males.	Females.	Total	
Fifteen years and less			1	2	8	1	-	1	
T 4			8	2 2 8 2 4 5	8 5	-	5	5	
20 to 25 years			3	8	11	5	7	12	
25 to 30 years			5	2	7	9	2	11	
80 to 85 years			5	4	9	6	5 7 2 6 5	12	
35 to 40 years			8	5	9 8	7	5	12	
40 to 50 years			1 8 3 5 5 6	14	20	7 7	20	27	
50 to 60 years		٠.		1 1	2	8	3	11	
60 to 70 years			8	-	8	2	1	3	
70 to 80 years			1	1 - 1	1	1	-	1	
Over 80 years .			_	- 1	_	1	- 1	1	
Unknown	•	•	17	11	28	1	-	1	
Total of persons			48	49	97	48	49	97	

5. Parentage of Persons admitted.

PLACES OF N	ATI	VITY		Ма	LES.	FEM	ALES.	To	faļL.
I DACES OF N	A 4 1	*****		Father.	Mother.	Father.	Mother.	Father.	Mother.
Massachusetts				19	16	15	18	84	20
New Hampshire	•	•	•	1	1 1	;		1 1	2 2
Vermont .	•	•	•	1 1	6	1 7	8	2 7	9
Connecticut	•	•	•	4 2	0	8	1		1 1
Rhode Island	•	•	•	2	=	1 7		3 1 1 2	ı i
New York	•	•	•	-	2	8	4	9	6
North Carolina	•	•	•	-	- 1	1	1	1	1
America .	•	•	•	1	1 1	-	-	1	1
Canada .	•	•	•	1	1 1	1	1		2 8
England .	•	•		1	8	5	5	6	
Ireland .		•	•	20	20	29	29	49	49
Wales .		•	•	1	-	-	-	1	I -
Germany .	•		•	2	2	2	2	4	4
Holland .				1	1	-	-	1	1
Sweden .	•		•	1	1	ļ -	-	1	1
Italy			•	-	-	1	1	1	1
Uuknown .	•	•	•	2	2	1	1	8	8
Totals of pers	ons		•	57	57	63	63	120	120

6. Residence of Persons admitted.

PLA	CES	L				Males.	Females.	Total.
Massachusetts, —								
Hampshire County	•			•	.	10	16	26
Hampden County	•	•				81	28	50
Berkshire County	•	٠.		•		11	13	24
Franklin County	•					4	6	10
Unknown .	•	•	•	•		1	-	1
Total of persons	?	•	•			57	63	120
Cities or large towns •						27	84	61
Country districts	•		•	•		29	29	58
Unknown	•		•	•		1	-	1
Total of persons	,	•				57	63	120

7. Civil Conditions of Persons admitted.

	UMBER OF THE ADMISSIO				Ux	MARR	IED.	MARRIED.			WIDOWED.			DIVORCED.		
NUMBER	OF	THE	ADMI	8810N.	Ma.	Fe.	Tot	Ma.	Fe.	Tot,	Ma	Fe.	Tot.	Na.	Fe.	Tot.
First		•	•	•	28	19	42	19	24	43	5	5	10	1	1	2
Second	•	•	•	•	3	4	7	8	в	9	-	8	8	-	_	-
Third			•	٠.	-	-	-	1	1	2	-	-	-	-	_	-
Fourth	•	•	•		-	-	-	1	-	1	-	-	-	-	-	-
Eighth	•		•		1	-	1		-	-	-	-	-	-	-	-
Tot	al c	of pe	rsons	•	27	23	50	24	31	55	5	8	18	1	1	2

^{*} Containing not less than 10,000 inhabitants.

8. Occupations of Persons admitted.

OCCUPATI	OBS.			Males.	OCCUPATIONS.	Females
County officer	•			1	Lawyer's wife	1
Clerk .	•	•		1	Musician's wife	1
Book-keeper	•		•	1	Farmer's wife	6
Manufacturer	•			1	Farm laborer's wife .	1
Piano-tuner				1	Laborer's wife	9
Freight-agent	•		•	1	Machinist's wife	8
Printer .	•			1	Watchmaker's wife	1
Farmer .	•			7	Millwright's wife	1
Farm-laborer	•	•		4	Carpenter's wife	1
Laborer .	•			14	Undertaker's wife	1
Mill operative				1	Fruit-seller's wife	1
Spinner .	•			1	Saloon-keeper's wife .	1
Weaver .				2	Tinsmith's wife	2
Machinist .	•			1	Fireman's wife	1
Mechanic .				1	Teacher	2
Watchmaker				1	Housekeeper	5
Paper-maker				2	Hospital attendant	1
Button-maker				1	Nurse	1
Carpenter .				2	Dressmaker	1
Carriage-maker				1	Laundress	1
Wheelwright		•.		1	Saloon-keeper	1
Cigar-maker		•		1	Mill operative	5
Hotel waiter				1	Paper-sorter	1
Tailor .				2	Servant	6
Baker .				1	None	9
Butcher .				1		
Stone-mason			•	1		1
None				4		
Total of per	sons		•	57	Total of persons	63

9. Reported Duration of Insanity before Last Admission.

PREVIOUS DURATION.		T ADMI			LL OT		TOTAL.		
	Ma	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Pe.	Tot.
Congenital	-	- 8	-7	1	-	1	1	-	1
From 1 to 3 months	6	7	13	-	1	-	6	3 8	14
				-	1	1		٥	14
8 to 6 months	4	5	9	-	_	-	4	5	9
6 to 12 months	. 5	5	10	1	=	1	6	5	11
1 to 2 years .	. 5	9	14	-	2	2	5	11	16
	8	6	14	1	2	8	9	8	17
5 to 10 years .	3	4	7	1	5	6	4	9	13
10 to 00	. 1	_	1	2	1	8	8	1	4
O 00	. -	1	1	ī	Ī	2	1	2	3
Tinknown	12		21	2	5	7	14	14	28
Total of cases .	48	49	97	9	17	26	57	66	123
Total of persons	. -	-	-	9	16	25	57	63	120
Average of known cases		2 10		Yrs. 164	Yrs. 8 71	Yn. 11 1 7	4.6	412	419

10. Form of Disease in the Cases admitted.

FOR	M ()F DI	SEASE	.			Males.	Females.	Total.
Mania, acute		•					22	18	40
Mania, chronic		•		•	•		10	15	25
Mania, chronic Mania, paretic		•		•	•	. 1	2		2
Mania, epileptic			•				1	8	4
Dipsomania -							1	_	1
Melancholia .				•		. 1	10	18	28
Dementia .			•			.	10	11	21
Dementia, acute	•	•	•	•	•		1	1	2
Total of case	s						57	66	128
Total of pers			•		•		57	63	120

^{*} In this division of the table the whole period of time, from the first attack to the last admission, is indicated.

11. Probable Causes of Insanity in Persons admitted.

	CA	USES	3.				Males.	Females.	Total.
	Phy	sica	l.						
Ill-health .			•			.	3	15	18
Intemperance	•	•	•	•	•		12	4	16
Over-work .	•	•	•	•		•	4	8	12
	•	•	•	•	•	•	3	4	7
Change of life			•	•	•	•	-	8	8
Masturbation		•	•	•	•	•	4	-	4
Bodily injuries	•	•	•	•		•	8	1	4
	•	•	•	•	•		-	1	4 1 1 1 1
	•	•	•				1	-	1
	•	•	•		•	• [1	-	1
		•	•	•		.	-	1	1
Old age .	•	•	•	•	•		1	_	
Congenital .	•	•	•	•	•	•	1	-	1
Total of phy	sical		•		•	.	88	42	75
	Me	ntai	!.						
Domestic trouble		•	•			.	1	4	5
Trouble .						.	1	4 2	8
Disappointment		•				.	_	8	3
Loss of friends				•			_	1 1	3 1 1
	•			•	•	.	-	ī	ī
	•	•	•	•	•		1	-	1
Total of mer	ntel					1		11	14
Total of phy			•	•	•	•	83	42	75
Unknown .	arcar	•	•	•	•	•	21	10	81
OHBHOWH .	•	•	•	•	•	.	<u></u>	10	
Total of pers	ons			•	•	.	57	63	120

12. Relation to Hospitals of the Persons admitted.

	Males.	Females.	Total.
Never before in any hospital	42	46	88
Former inmates of this hospital	6	11	17
Former inmates of other hospitals in this State:—			
Danvers	1	! -	1
Shady Lawn, Northampton	-	1	1
Former inmates of hospitals in other States,	5	1	б
Former inmates of this hospital and of other hospitals in this State:—			
South Boston and Taunton	1	l · -	1
Former inmates of this hospital and of hos-			_
pitals in other States	2	8	5
Former inmates of this hospital, of other hospitals in this State, and of hospitals in			
other States	_	-	-
Former inmate of hospital in England .	-	1	1
Totals	57	68	120

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13. Discharges, classified by Admission and Result.

	# # # # # # # # # # # # # # # # # # #	RECOVERED.	é	Жссп	Mcch Improved.	ė	1	IXPROTED.		C C	Сипкрючер.	å		Died.			TOTAL.		
Admission.	Nales.	Femules.	.fatoT	Males.	Females.	LasoT	Makes.	Females.	LaloT	Males.	Pemales.	LaioT	Make	Females.	Total	Males.	Females.	.laloT	
First	10	13	17	4	4	∞	13	12	22	ю	-	12	14	∞	ફા	41	43	1 8	
Second	_	1	-	Ħ	က	4	ı	83	63	-	83	ဆ	61	61	4	10	0	14	
Third	1	-	-	-	ı	-	-	ı	-	1	_	-	ı	ı	ı	63	61	4	
Fourth	-	1	-	ı	1	ı	ı	7	-	1	ı	ı	1	ı	ı	-	-	C3	
Eighth	ı	ı	1	1	1	1	-	ı	-	ı	1	ı	1	ı	ı	-	1	-	
Total of cases .	7	13	20	8	2	133	15	15	8	9	91	18	2	2	ဥ္ပ	28	55	105	
Total of persons	1	ı	ı	1	ı	1	ı	ı	l	ı	1	ı	ı	ı	ı	23	23	103	

One man was discharged as not insane, making the total of cases 106 and the total of persons 104.

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14. How supported.

SUPPORTED A	.8		Pati	EKTS ADM	ITTED.	Aver	LCE OF TR	E YEAR.
			Males.	Females.	Total.	Males.	Females.	Total.
State patients .	•	•	21	19	40	96.84	83.98	180.82
Town patients .			27	87	64	101.63	112.52	214.15
Private patients			9	10	19	29.73	27.46	57,19
Total of cases	•	•	57	66	123	-	-	452.16

15. Cases discharged Recovered. — Duration.

PERIOD.		TION E		Hos	PITAL		NI .	LE DUI	
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot	Ma.	Fe.	Tot.
Congenital	-	-	_	-	-	-	-	-	-
Under 1 month	-	8	8	-	-	_	-	-	-
From 1 to 8 months .	2	1	8	8	4	7	-	-	-
8 to 6 months .	1	2	8	2	2	4	1	-	1
6 to 12 months .	-	1	1	1	1	2	2	2	4
1 to 2 years	_	4	4	1	8	4	-	5	5
2 to 5 years	-	_	-	-	8	8	-	4	4
5 to 10 years	-	-	-	_	-	_	-	-	-
10 to 20 years	-	-	_	_	_	_	_	-	_
Over 20 years	-	-	_	-	-	-	_	-	_
Unknown	4	2	6	-	-	_	4	.2	6
Total of cases	7	13	20	7	13	20	7	13	20
Total of persons	7	13	20	7	18	20	7	13	20
Average of known cases (in months)	28	9.6	814	51	14.18	11 1	51	19 ₁₁	16 <u>‡</u>

[•] This, the weekly average, is larger by the fraction of $\frac{37}{1001}$ than the daily average, which was 451.79.

16. Cases resulting in Death. — Duration.

PERIOD.		TION I	EFORE DN.		PITAL Dence.		H		RATION TTACE.
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital	-	-	-	-	-	-	-	-	-
Under 1 month	1	1	2	1	-	1	-	-	-
From 1 to 8 months .	8	-	3	1	2	8	_	-	-
8 to 6 months .	1	1	2	1	_	1	-	_	-
6 to 12 months .	1	2	8	1	1	2	1	8	4
1 to 2 years	1	_	1	1	1	2	-	_	-
2 to 5 years	5	8	8	7	2	9	7	_	7.
5 to 10 years	4	1	5	2	2	4	8	4	7
10 to 20 years	_	2	2	1	2	8	8	1	4
Over 20 years	-	_	_	1	-	1	2	2	4
Unknown	_	_	_	_	_	_	_	_	_
Totals	16	10	26	16	10	26	16	10	26
Average of known cases (in months)	38] §	53 ₁	44 <u>1</u> 1	65,1	62 ₁ %	64	104	115]	108 11

17. Cases discharged by Recovery or Death.

FORM OF INS	ANII	ry.		R	ECOVERIES	•		DBATES.	•
				Males.	Females.	Total.	Måles.	Females.	Total.
Mania, acute		•		6	12	18	_	1	_
Mania, chronic		•	•	1	-	1	8	8	6
Mania, paretic		•		_	_	_	8	_	8
Mania, epileptic		•		_	_	_	2	2	4
Melancholia .		•		_	1	1	1	8	4
Dementia .		•		-	-	-	6	1	7
Dementia, pareti	C	•		_	-	-	1	_	1
Dementia, epilep	tic	•	•	-	-	-	-	1	1
Totals .	•	•	•	7	18	20	16	10	26

18. Causes of Death.

CAUSES.	Males,	Females.	Total.
Nervous System. — Paresis	4	_	4
Chronic disease of the			
_ brain	1	-	Ĭ
Epilepsy	-	2	2
Paralysis	-	2	2
Circulatory. — Heart disease	1	-	1
Respiratory. — Pneumonia	1	-	1
Phthisis	2	1	8
Digestive. — Enteritis	1 -	ī	ĭ
Colliquative diarrhœa	1	1 1	î
	1 -	1 1	i
	-	1	1
Erysipelas	1 7	1 1	÷
Urinary. — Nephria, or Bright's disease .	1 1	- 1	1
General. — Old age	1	-	1
Marasmus	8	1 1	4
Accidental. — Suicide	1	1	2
Totals	16	10	26

19. Deaths, classified by Results of Previous Admissions.

NUMBER OF THE	REC	OVE	RED.		MTCI		In	PROV	ED.	Uxi	MPRO	AED	1	OTAI	L
ADMISSIOM.	Ma	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ма	Fe.	Tot.	Ma.	Fe.	Tot.
First	-	_	-	-	-	-	2	2	4	1	-	1	8	2	5
Total of cases,	-	-	-	-	-	-	-	-	-	-	-	-	8	2	5

20. Recoveries, classified by Results of Previous Admissions.*

NUMBER OF THE	RE	COVE	RED		Muci		Ixi	PROV	ED.	CRI	MPRO	AND	7	OTAI	<u>. </u>
ADMISSION.	Ma.	Fe.	ToL	Va.	Fe.	Tot.	Me.	Fa.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First Second . Third	1 - 1	- 1 -	1 1 1		-	1 1 1			- - -	-		-		1 1 1	
Tot. of persons	2	1	8	-	-	-	-	-	-	-	-	-	-	_	_

^{*} In all the cases of more than one admission, this classification is based upon the result of the admission next preceding the last in each case respectively.

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21. Deaths, classified by Duration of Insanity and of Treatment.

PERIOD.		FIRST A			KROWE P.	
	Males.	Females	Total.	Males.	Females.	Total.
Congenital	_	_	_	_	_	_
Under 1 month	-	-	-	1	-	1
From 1 to 8 months	-	-	-	1	1	2
8 to 6 months	-	_	-	1	-	1
6 to 12 months	1	2	3	1	1	2
1 to 2 years	8	-	3	1	1	2
2 to 5 years	8	1 2 2 8	3 4 6	1 8 5	1 1 2 8	2 5 8
5 to 10 years 10 to 20 years	4 8	2	6	5	8	8
10 to 20 years	8	2	5 5	2	2	4
Over 20 years	2	8	5	1	-	1
Unknown	-	-	-	-	-	-
Totals	16	10	26	16	10	26
Average of known cases (in		l		il .	i	
months)	12114	173	14112	76	66 7	7219

22. Ages of those who Died.

AGES.			AT TU	ATTACE.	FIRST	AT T	TME OF D	EATH.
		٠	Males.	Females.	Total.	Males.	Females.	Total.
Fifteen years and less	•	•	1	2	8 2	1	_	1
From 15 to 20 years	•		1 2	_	2	_	-	_
20 to 25 years			-	- 1	-	_	1	1
25 to 30 years			1	_	1	2	-	2
30 to 35 years			1 2 2	2 1 4	1 4 8 5 2	_	2	2 5
35 to 40 years				1 1	8	4	1 2 1	5
40 to 50 years			1 2	4	5	4	2	6
50 to 60 years			2	-	2	_		1
60 to 70 years			1	-	1	1	3	4
70 to 80 years			1	- 1	1	8	_	3
Over 80 years .			_	_	-	1	-	1
Unknown	•	•	8	1	4	-	-	-
Totals		•	16	10	26	16	10	26

28. Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1881.

			Total.	1	1	1	ı	1	•	1	ı	-	1	ı	1
		DIED.	Females.		7	ı	1	1	1	ı	1	-	,	1	1
		٩	Males.	-	ı	1	ï	1	1	1	1	1	1	1	1
		é	Total.	1	1	1	1	ı	1	1	1	1	1	1	1
	11.	UNIMPROVED.	Females.	<u></u>	ı	1	1	ı	1	ı	ı	ı	ı	1	1
	880-6	UNI	Males.	1	1	1	1	1	ı	ı	1	1	ı	ı	1
	DISCHARGED AND DIED IN 1880-81.	· a	Total	1	Н	ı	1	1	1	ı	ī	ı	ı	1	-
HOKS).	rp Du	IMPROVED.	Femules.	1	-	ı	ı	1	ı	1	ı	ı	1	1	_
NEW CASES (First Admissious).	CED A	IN	Malen,	1	ī	1	1	1	ı	1	1	ı	ı	1	1
FIRST .	SCHAR	VED.	Total.	1	1	1	1	ī	1	1	1	ļ	1	ı	1
SES (Ã	HUCH IMPROVED.	Females.	1	1	1	1	1	1	.i	ı	1	ı	ı	1
W CA		жсен	Males.	ı	ı	1	1	1	1	ı	1	ı	1	1	-
NE		G	Тоба.	1	1	1	1	1	ı	1	1	1	١	1	1
		RECOVERED.	Females.	1	1	1	1	1	١	1	1	١	١	1	1
		Ä	Males.	1	1	ı	ı	ı	1	ı	1	1	1	1	1
			Total.	228	88	157	104	8	113	65	109	118	111	125	186
	Anvirren		Females.	129	46	91	48	43	29	8	55	22	69	1	64
	•	ı	Males.	66	45	99	28	21	28	35	25	8	64	2	72
				•	•	•	•	•	•	•	•	•	•	•	•
				•	•	•	•	•	•.	•	•			•	•
				•						•	•	•	•	•	•
		mi		•		•									
		YEARS.													•
		•		nths	•	•	•	•	•	•	•	•		•	•
				1858, 2 months	1858-59	1859-60	1860-61	1861-62	1862 - 63	1863-64	1864-65	1865-66	1866-67	1867-68	1868-69

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1869-70	•	•	•	•		•	8	108	188	ī	ī	ī	1	-	<u> </u>	-	-	·		<u>-</u>	_	<u>.</u>	- -	ı
1870-71	•	•	•	•	•	•	88	88	181	1	ı	1	1	1	ı	1	1	<u>.</u>	1	<u> </u>	_	<u>'</u>	<u> </u>	,
1871-73		•	•	•	•	•	88	88	168	ı	ı	1	ı	1	1	1	1	<u>.</u>	<u> </u>	<u> </u>			_	01
1872-73	•	•	•	•	•	•	8	8	168	1	1	1	1	1	1	1	1	· 1		1	1			-
1873-74	•	•	•	•	•	•	88	69	155	ı	i	ı	1	Т	1	1	1	<u>.</u>	1	1	<u> </u>			_
1874-75		•	•	•	•	•	61	2	128	1	ı	1	ı	1	1		-	-	1	<u> </u>	· 1	· -	1	ı
1875-76			•	•	•	•	89	89	126	1	ı	1	1	ı	1	_	-	<u>.</u>	1		· ·	<u> </u>		-
1876-77	•	•	•	•	•	•	22	32	110	ı	61	61	1	-	-	1	1	•	1	<u> </u>	1	<u>'</u>		4
1877-78		•	•	•	•	•	31	24	22	ı	-	_	_	ı	-	-	_	. 63	_	_				-
. 62-8291	•	•	•	•	•	•	48	\$	88	ı	-	-	-	1	-	1	_			<u> </u>	_	<u>,</u>		01
1879-80	•	•	•	•	•	•	28	47	26	-	80	4	1	_	-	4	4	<u>∞</u>	61	10		~ ~	61	4
1880-81	•	•	•	•	•	•	48	49	84	4	10	0	83	63	4	∞	89	=	67	_	8		_	4
Totals	•	•	•	•	•	•	1,483	1,501	2,984	ō	12	17	4	+	8	13	12 5	25	2	7 12	2 14	<u> </u>	8	ន

One man discharged as not insane is not included in this table, there being no colunn for him.

Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1881. —Concluded. REMAINING OF BACH YEAR'S ADMISSIONS, 28 Total SEPT. 30, 1881. LaioT Ġ ı ı ı ı 1 ŧ ı ı ı ı ı ı LatoT UKIMPROVED. ı t ı DISCHARGED AND DIED IN 1880-81. ı ı ١ ı ı 1 ı Males. ı ı ı ı ı ı ı ŧ Total IMPROVED. RE-ADMITTED CASES. ı ı ١ ı ı ı ١ ı ı 1 ١ ı Males. IMPROVED. ı ı ŧ ۱ Total. ı 1 ı ۱ ı ı ١ MCCH ı 1 ı ı ı ı ı Males ۱ Total. RECOVERED. ı ı 8 2 8 18 23 25 28 24 27 27 Total. ADMITTED. 73 23 2 13 ខ្ម 14 12 18 14 53 10 YEARS. 1858, 2 months 1859-60 1861-62 1864-65 1865-66 1860-61 1862-63 1863-64 1866-67

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•	•	•	•	•	•	•	•	•	•	•	•	•
•		•			•	•	•		•	•	•	•
1869-70	1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1778-77	1877-78	1878-79	1879-80	1880-81	Totals

24. Relapsed Cuses admitted in each Year, and discharged in 1881.

1888 2 1990 199								Ċ	ASES	PREV	TOUSE	Y BE	COVE	RED 1	N TH	13 110	CASES PREVIOUSLY RECOVERED IN THIS HOSPITAL.	ن ا							
Market M	•			!	4							À	ISCHAN	GED A	E DI	8	1881.						Brn Sert.	AIXIX 30. 18	• :
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1					Males.	Females.	LatoT	Males.	Females.	.faloT	Males.	Females.	Total.	Males.	Females.	LatoT	Males.	Females.	.fatoT			.IntoT	Malos.	l'emales.	Total.
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1874-75	10	-	ī	1	1		<u>'</u>	-	-	1	ı	ı	ı	ı	1	ı	03	C)
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Totals 126 128 2	128 254	1 2	1	ဆ	1	2	3	1	1	<u> </u>	'	-	'	1	-	7	16	83

* By an oversight, last year, there were six cases—two men and four women—in this section of the table, which did not belong in it. The patients were here, but they were not cases of relapse.

25. Classed Average of Patients.

OFFI	CIAL	YEAR	•	State Patients.	Town Patients.	Private Patients.	Total
Month	ly A	verag	e.				
1864-65				225.10	48.16	69.83	343.25
1865-66	•	•	•	252.16	50.58	75.58	378.33
Week	ly A	verage	e.				
1866-67				261.96	49.46	89.75	401.17
1867-68				262.65	47.02	103.06	413.6
1868-69		•		248 52	54.98	101.46	404.90
1869-70	•			236.19	65.04	107.23	408.40
1870-71				234.10	77.07	118.38	429.5
1871-72				226.96	89 57	112 27	428 80
1872-78				248 02	99.23	90.00	437.2
1873-74				284.48	102 88	82 06	469 49
1874-75				274 35	128.34	72.46	475 1
1875-76				259.19	146.02	68 94	474.15
1876-77				254.84	161.58	60 02	476.4
1877-78				211 90	175 71	54 75	442 80
1878-79				200.34	182 29	54 23	436 86
1879-80	•	•		197.03	198.01	55.46	450 50
1880-81				180.82	214.15	57.19	452.1

26. Monthly Consumption of Gas.

	•	M	ONTHS	3.				Cubic Feet.	Daily Average
			1880.						
October							. 1	32,250	1,040.82
November								89,750	1,325 00
December	•	•	•	•	•	•		44,750	1,443.55
		1	1881.						
January								43,300	1,396.77
February					•			33,200	1,185 71
March .								31.350	1,011 29
April .								20.550	685 00
May .					•			14.650	472 58
June .		·		-				12,400	413 33
July .	•		•		-	•		11,400	367.74
August	·	:	·	-	•	•		13,750	443.54
September		•	•	:	•	:		22,850	745.00
Totals				•	•		.	819,700	875.89

Daily average for the year.

27. Supplies for the Several Depatments for the Year 1880-81.

I	1		١.
Lanterna		11-11-11111101	1
Fortes.	8 14 10 1 1 H I I	1110181141118	84
Knives.	865	(4) (4) (6) (6) (7)	61
Syrup-cups.	11111111	11111-111111111	П
Pitchers.	484481111	1111	23
Bowls.	001101101	1 100 10 1 1 100 14 10	73
·e\$n _M	819146311	101010011811111	2
Tamblers.	22 1010114	113 113 113 113 113 113 113 113 113 113	<u>0</u> 2
Вацоета.	89 1898 188	181 9 21 9 9 1 1 1 8 4 1 1	<u>8</u>
Cupie	33.9212	12021210111811	141
Plates.	5: 2382-082		8
Carpet-strips.	#8-111111	101110011001100	æ
Combs.	11-21-44212	11 24 26 4 4 4 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	26
Hair-brushes.	188448118	11111111111	12
.aromia	I I M H H M I I H	1011011111111111	12
Сратврета.	181-1100172	92129889224391199	202
Ewers.	11111111	ee ille Hellili	4
.afwod-daaW	ielieliel	HØ H	12
Curtains.	86-11-01-48	H4 4 00H 01H	45
Towels,	811180140	212 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	88
Pillow-ticks.	1041700141	111111111111111111111111111111111111111	45
Bed-ticks.	၂ ၊ ၉အထထပ္သည္	141001110011110	88
Виррег ярееы.	011114011	140040040410111	#
Blankets.	2 日本 1 日本 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 	111110010001111	93
Bed-spreads.	रू। 11 - 984 । 1	151 164 11 1616166	2
Pillow-cases.	2223882222	88428845144588160	\$
Specia,	818 82 84 84 84 84 12 13 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	21	85
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i	* B *	57 5 5 5 5	g,
	Men's Department Upper 1st Hall . 2d Hall . 3d and 4th Ha Middle 1st Hall . 2d Hall . 3d and 4th Ha Lower 1st Hall . 3d and 4th Ha	Women's Departme Upper 1st Hall 2d Hall 3d Hall 4th Hall Middle 1st Hall 3d Hall 3d Hall 3d Hall 4th Hall 4th Hall 4th Hall 4th Hall 3d Hall 4th Hall 6th Hall 3d Hall 3d Hall 3d Hall 6th Hall 3d Hall 3d Hall 3d Hall 6th	Ą

1	В Срашрета.	114120114	11101111111111	22
	Papers Pins.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	884981888888181	; !!
	Papers L'ecdles.	181111111	1844-4184681111	8
	Thread.	11111111	11001111110111	8
	Skeins Linen	1=1111111		!!
	.bsordT alooq8		111071158557165111	125
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led	Blacking.		11111111111	107
lo lo	Spittoons.	*#!#!#!!		4
S	Patte.	118844484		8
Ĭ.	Mops.	20000122222222222222222222222222222222	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22
18	Dust-pans.		[84] [4] [4]	∞
880	Scrubbing- brushes.	11111111111		&
r 18	ъэциплерея развирея	1 2 3	111-1101	g.
Yea	Whise.	441414110	11041411111100	17
he	Brooms	22 22 23 23 23 24 25 25 25 25 26 26 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28	25 - 25 - 25 - 25 - 25 - 25 - 25 - 25 -	98
27. Supplies for the Several Departments for the Year $1880 extstyle-81$ — Concluded.	Soap, pounda.	829823232	84884884888888	1,222
ents	Wash-basina,	11-81-1		22
rtm	Rollers.	6 6 6 6 6 6 6 6	111018 11111001	8
eba	Diah-towels.	រដ្ឋាភិត្តាស្ន	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	142
n I	Iron Spoons,	09 - 08 T - F 4	1 14 12822 123 133 1 1 1 1	295
ver	Tin Cups.	181111400	1111110010111111	8
e S	Tin Plates.	111111100	1101110010111211	111
r th	Napkins.	91111111	<u> </u>	18
8 fo	.abasrqa-olda'l'	1-111111	Ø4:11011ØØ11111	14
plie	Слава Савита.	HH (H (H ())	111044140111011	82
Sup	Spoons.	011111111	1011111111111	21
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	1	Men's Department. Ist Hall 2d Hall 3d and 4th Halls 2d Hall 2d Hall 3d and 4th Halls 3d and 4th Halls 3d and 4th Halls	Women's Department. let 1st Hall 3d Hall 3d Hall 4th Hall 2l Hall 3d Hall 6r 1st Hall 6r 1st Hall 3d Hall 4th Hall 6r 1st Hall 7d Hall 6r 1st Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall 7d Hall	• 1
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		Jpper liddle	W _C Upper Middle Middle Lower Electric Control Contro	Agg
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MONTHS.		FARM.		Kitchen.		Sewing- Room.		LAUNDRY	•
		Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total.
1880.				l .					
October		708	124	272	896	146	21	290	311
November -		606	120	248	368	153	22	321	343
December	•	448	124	287	361	169	28	819	342
1881.						1			ĺ
January		487	124	237	361	154	13	826	839
February		412	112	221	833	142	20	811	331
March .		434	124	240	364	149	28	848	366
April .		597	150	223	378	147	24	801	825
May .		716	155	219	374	144	32	836	368
June .	•	814	150	218	868	155	85	350	385
July .		801	155	221	376	161	46	270	816
August.		776	155	233	388	156	46	328	374
September	•	646	150	235	385	129	48	342	890
Totals		7,445	1,648	2,804	4,447	1,805	858	3,837	4,190

28. Days' Work by Patients.

The total of days' work here recorded is 17,887. This is what was performed by the regular workers on the farm and in the three departments mentioned. No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler-room, the mattress-room, and the carpenter's shop. A large amount of other work is done both in the halls, and, at irregular times, out of them.

29. List of Articles made in the Sewing-room.

Dresses					260	Bolster-cases .			53
Chemises			•		398	Spreads, hemmed			79
Aprons	•		•		148	Bags			21
Waists				. •	12	Table-spreads .			14
Sacques	•				15	Towels			316
Drawers	•		•		77	Towels, hemmed			114
Skirts	•		•	•	147	Napkins			18
Nightdress	8 8			•	18	Roller-towels .			81
Collars					115	Bureau-spreads .			4
Shirts	•		•		196	Waiter-napkins.			6
Camisoles	•				30	Dish-towels .		•	10
Pants (pair	rs)				2	Curtains			56
Straw-ticks	3				19	Carpets			5
Mattress-ti	cks				27	Carpet-strips, hemme	ed		53
Feather-tic	ks				16	Handkerchiefs .			2
Pillow-tick	8				55	Suspenders (pairs)			114
Bolster-tick	83				2	Hats trimmed .			18
Sheets		•			43 8	Ox-blankets .			2
Pillow-case	8	•			485	Articles repaired	•	•	18,358

30. Upholstery done in the Year.

Hair-mattresses made, new materials .					15
Hair-mattresses made, new ficks				•	83
Hair-mattresses overhauled, hair repicked			•	•	22
Husk-mattresses made, new materials .					12
Hnsk-mattresses made, new husks .					8
Husk-mattresses overhauled, with increase	of h	usks			20
New husk under-beds made, new materials					15
Old under-bedticks filled with new husks					103
Hair-pillows made, new materials					20
Hair-pillows overhauled, hair repicked .		•			12
Hair-pillows repicked, and put in new ticks					13
• • •					

31. Annual Cost of Gas,

	3	YEAR.				Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860-61		•	•	•		\$2,030 39	814.26	\$ 6 46
1861–62	•	•	•	•	•	2,085 29	313.80	6 64
1862-63	•		•	•	•	2,109 02	855.68	5 93
1863-64			•	•		2,069 79	857.68	5 78
1864–65		•	•	•		1,653 05	842.40	4 82
1865-66	•		•	•		1,107 98	376.85	2 94
1866-67	•	•	•	•	•	1,056 16	401.08	2 63
1867-68	•	•	•	•	•	1,022 51	413.41	2 47
1868-69	•		•	•	•	903 92	405.10	2 23
1869–70	•		•	•	•	915 80	408.83	2 23
1870–71			•	•		1,048 99	421.90	2 47
1871-72		•	•	•		980 94	428.72	2 28
1872–73		•	•	•	•	1,006 61	437 28	2 80
1878–74			•	•	•	1,066 74	469.54	2 27
1874–75		•		•		1,012 63	475.85	2 13
1875-76						1,089 82	474 21	2. 29
1876–77	•	•	•	•	•	1,033 59	476.16	2 17
1877-78	•					1,066 02	442.43	2 41
1878-79		•		•	•	1,088 05	436 78	2 87
1879–80	•		•	• .		945 00	450.51	2 10
1880–81		•	•	•	•	949 65	451.79	2 10

The hospital has always been supplied with gas by the Northampton Gas-Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since that time it has been but \$3.00, including meter-rent, and, during the last year, with a discount of 5 per cent.

32. Trustees of the Northampton Lunatic Hospital.

NAME.	Residence,	When app'ted.	Service ended.	From what Cause.
Charles E. Forbes • .	Northampton .	1856	1857	Term expired.
Lucien C. Boynton .	Uxbridge	1856	1858	do. do.
Eliphalet Trask .	Springfield	1856	1875	do. do.
John C. Russell • .	Great Barrington,	1856	1859	Resigned.
Horace Lyman	Greenfield	1856	1857	Removed.
Charles Smith	Northampton .	1857	1860	Resigned.
Luther V. Bell • .	Somerville	1857	1859	do.
Zebina L. Raymond •	Greenfield	1858	1859	do.
Franklin Ripley • .	Greenfield	1859	1860	Died in office.
Edward Dickinson .	Amherst	1859	1864	Resigned.
Walter Laflin • .	Pittsfield	1859	1866	Term expired.
Silas M. Smith .	Northampten .	1860	1863	do. do.
Charles Allen	Greenfield	1860	1861	Resigned.
Alfred R. Field .	Greenfield	1861	1864	do.
Edward Hitchcock .	Amherst	1863	1879	do.
Silas M. Smith .	Northampton .	1864	-	Still in office.
Edmund H. Sawyer •	Easthampton .	1864	1879	Died in office.
Henry L. Sabin .	Williamstown .	1866	1876	Term expired.
Adams C. Deane .	Greenfield	1875	-	Still in office.
Henry W. Taft .	Pittsfield	1876	_	do. do.
William M. Gaylord,	Northampton .	1879	-	do. do.
Lyman D. James .	Williamsburg .	1879	_	do. do.

Deceased.

33. Officers and Employés. Time employed March 1, 1881.

NAME.	Years.	Months.	Days
Pliny Earle, M.D., Superintendent	16	7	26
Edward B. Nims, M.D., 1st Ass't Physician,		2	14
Daniel Pickard, M.D., 2d Ass't Physician .	8	10	22
Walter B. Welton, Clerk	15	_	14
Asa Wright, Farmer	28	8	
Danford Morse, Engineer	16	_	7
Robert H. Gallivan, Supervisor	7	10	11
Lucy A. Gilbert, Supervisor	14	_	18
F. Josephus Rice, Steward	22	4	24
Mary Ward, Seamstress	10	6	3
Nell Russell, Laundress	8	11	8
Charles Ziehlke, Baker	18	6	_
Frances C. Earle, Assistant Clerk	8	11	6
Atlanta J. McPhee, Assistant Supervisor .	5	5	12
Stella Allis, Assistant Seamstress	_	li	29
Minnie J. Howes, Assistant Laundress .	2	9	19
Perry Davis, Attendant	11	4	16
Thomas Powers, Attendant	6	11	ii
James Neill, Attendant	5	7	21
Walter Pillinger, Attendant	6	9	29
Michael Powers, Attendant	ž	10	6
A11 36 (T) A443A	ī	6	10
Willard C. Ellis, Attendant	l î	7	1 10
Thursday Cl. 117111	1 -	11	26
1):-	2	7	16
Coores F Dood Attendent	_	4	14
Inner D Dard Aller Jank	1 -	i	21
	_	i	6
Luke Belville, Attendant	13	l i	7
Maria E. Graves, Attendant	6	6	7
Martha R. Harris, Attendant	5	10	8
Jane McGuire, Attendant	1 =	10	
Nellie M. Henchy, Attendant	5		2
Mary Ransom, Attendant		8	15
Victoria S. Pillinger, Attendant	4	8	9
Cora Woodward, Attendant	4	4	10
Cecile Riel, Attendant	4	4	23
Minnie J. Guilfoil, Attendant	2	5	24
Maggie F. McKenna, Attendant	1	11	9
Mary C. McKenna, Attendant	1	9	26
Maria F. Parker, Attendant	_	10	15
Naomi A Griffin, Attendant	-	9	21
Bessie J. Burnham, Attendant	-	9	15
Ellen C. Potter, Attendant		4	21
William C. Hall, Assistant Engineer	15	5	17
Nicholas Riel, Night Engineer	5	2	25
Andrew N. Thorington, Watchman	10	1	80
Sifroi Belville, Carpenter	10	10	7
Waldy Tetro, Carpenter	. 7	11	23
Walter Tower, Carpenter	. 4	8	-
Alfred Parenteau, Painter	. 15	6	18

76 NORTHAMPTON LUNATIC HOSPITAL. [Oct. '81.

Officers and Employés - Concluded.

NAME.	Years.	Months.	Days.
David Mercier, Coachman	. 4	_	14
Charles Egen, Assistant Baker	. 8	5	4
Benjamin Rockwell, Assistant Farmer	. 13	9	_
John Mercier, Assistant Farmer	. 13	8	-
Elson E. Howes, Assistant Farmer .	. 3	11	. 23
Julius Freeman, Assistant Farmer .	. '8	7	24
Henry Wilson, Assistant Farmer .	. 1	10	8
Erie L. Ditty, Assistant Farmer	. -	9	26

Nine of the persons have not been in their present situations during the whole period of service; for example, the supervisors, the assistant supervisor, and the seamstress were formerly attendants.

Twelve of the persons have been employed more than once. In these instances the table gives the total time of service.

TWENTY-SEVENTH ANNUAL REPORT

OF

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT NORTHAMPTON,

FOR THE YEAR ENDING SEPTEMBER 30, 1882.

BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS, 18 Post Office Square.

1883.

OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

Hon. WILLIAM M. GAYLORD,				•	NORTHAMPTON.
SILAS M. SMITH, Esq.,					Northampton.
ADAMS C. DEANE, M.D., .					GREENFIELD.
HENRY W. TAFT, Esq.,					PITTSFIELD.
LYMAN D. JAMES, Esq.,	_	_	_	_	WILLIAMSRURG.

RESIDENT OFFICERS.

PLINY EARLE, A.M., M.D.,	•	•	•	. Superintendent.
EDWARD B. NIMS, M.D.,				. Assistant Superintendent.
DANIEL PICKARD, M.D.,				. FIRST ASSISTANT PHYSICIAN.
DAVID G. HALL, M.D., .	•	•		. SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON, .			•	. CLERK.
JOHN MERCIER,			•	. Acting Farmer.
DANFORD MORSE,	•	•	•	. Engineer.

TREASURER.

PLINY EARLE,	•	•	•	•	•	•	•	•	Northampton.
			Office	at th	e Ho	ospita	d.		

SUBORDINATE OFFICERS.

ROBERT H. GALLIVAN	,	•			MALE SUPERVISOR.
LUCY A. GILBERT, .					FEMALE SUPERVISOR.
F. JOSEPHUS RICE,					STEWARD.
MARY E. WARD, .					SEAMSTRESS.
MINNIE J. HOWES,.					Laundress.
CHARLES ZIEHLKE,			•	•	BAKER.

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Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor of the Commonwealth and the Honorable Council.

Another official year in the history of the Northampton Lunatic Hospital having expired, we, its Trustees, have the honor to present to you our twenty-seventh annual report, which gives an ecount of the proceedings of that period.

The special object of the institution being the custody, the care and the restoration to health of persons afflicted by disease, it would appear to be our first duty to show to what extent those objects have been attained. This is done in a general way in the following brief summary.

The number of patients in the hospital on the 1st of October, 1881, was, of men, 229, and of women, 234; making a total of 463. The number admitted in the course of the official year was, of men, 62, and of women, 62; a total of 124. Consequently the whole number who, during the last twelvementh, have received the benefits of this institution, is 587, of whom 291 were men and 296 women.

In the course of the same period, and not including deaths, 38 men and 52 women, a total of 90, were discharged.

The whole number of deaths was 38, of which 24 were of men and 14 of women.

On the 30th of September, 1882, the closing day of the official year, the number of patients in the hospital was, of men, 229, and of women, 230; a total of 459. The daily average number of patients for the year was 461. The largest number in the house on any day was 469, on the 2d

of December, and again on the 24th of May; and the smallest number on any day, 452, on three days in March, soon after the discharge of 10 female patients who were transferred to the State's receptacle at Tewksbury.

Of the 90 patients who left the hospital, the mental condition at the time of discharge was recorded as recovered in 28, much improved in 13, improved in 21, unimproved in 27, and not insane in 1.

For further particulars in regard to the medical history of the institution during the year, we beg leave to refer you to the more detailed report of the Superintendent, which is hereto appended.

Notwithstanding the obstacles against which we have been obliged to contend, among which are an advance in the price of meats to a point unparalleled even during the recent civil war, or within the last fifty years, an increase of the cost of flour, butter and some other articles of daily consumption, and the perhaps still greater drawback of the very remarkable drouth of July and August, which resulted in a very important diminution of the products of the farm and the garden, the regular income of the hospital was sufficient not only to defray its current expenses, but to continue, to a very considerable extent, the series of improvements of the premises in which we have heretofore been engaged.

In our last year's annual report we gave an account of the introduction, in the course of that official year, of a steam fire-pump, with its accompanying apparatus, as a further security against conflagration. A subterranean reservoir for a sufficient body of water to supply that pump in case of necessity had then been begun, but, not being completed, it was not mentioned. It was finished later in the autumn. It is circular, sixteen feet in diameter, and fourteen feet eight inches deep from the spring of the dome; and the arch of the dome adds five feet to this depth. The whole structure is of brick, and has a capacity of about eight hundred barrels. Excepting a few inches at the surface, the excavation for it was through a solid layer of "hard-pan."

The gradual encroachment of Mill River upon the meadow west of the hospital building, now one of the most fertile and productive sections of the farm, was mentioned in a

former report, together with a statement of the preventive measures which had then been taken. In the autumn of 1881 this preventive work, which consisted of ripraps upon the southern bank of the river, was resumed, and prosecuted until prevented by the frosts of early winter. Two sections of the slope of the river bank, making a total length of four hundred and sixty-five, and an average width of about twenty-two feet, were entirely covered with rocks, as closely laid as possible. As will be perceived, the quantity of stone required was very large. Much labor was also expended in grading and filling in the bank, in order to produce a uniform and proper slope, as well as a suitable bed for the rocks. The work was well done, and, so far as it has gone, forms a barrier which apparently places that part of the meadow in security against future floods. There are other sections which will require similar protection hereafter.

One of the most expensive improvements made in the official year was the construction of a dam, together with the grading and other necessary work, for a pond intended to supply the hospital with ice. The water of Mill River, the source upon which the institution was formerly dependent for this now apparently necessary article of consumption, having become the receptacle of many impurities, it was thought unfit to be used as a beverage, and for the last two years the supply of ice for drinking purposes was purchased at an inland pond, about a mile from the hospital. Having what was considered a good site for a pond upon the premises, and only about half a mile from the hospital, we decided it best to take advantage of it. The dam, as constructed, is a specimen of strong, substantial and carefully performed stone masonry and earthwork, the duration of which is to be measured, not by the life of a man, but by the existence of an institution. The flowage will be equal to about one acre, with an average depth of perhaps four feet. The pond will be supplied by several small but permanent springs, and the surface water of perhaps fifty acres of land.

The meadow above mentioned lies low, is partially surrounded by hills of steep declivity, and is so situated that some twenty acres near its southern extremity could formerly be reached by teams only by a very circuitous route. One of

the first pieces of extra work of the current warm season was the making of a new road down the declivity near the pump-house. This road shortens the distance from the barn to that section of the meadow by more than one-half, and thus greatly facilitates the work of cultivating that portion of the farm.

The location of the road near the sand-pit, at the south-westerly corner of the meadow and near the public highway, has been altered, shortening the distance to that part of the meadow, and lessening the grade of the descent of the hill. The rough and unsightly land between the new and the old site is reduced to a gentle and uniform slope, very greatly improving the appearance of the place.

A new road has been laid out through the north grove, more remote from the hospital than the one now in use. It is intended for the heavy traffic of teams engaged in the agricultural department of the institution, as they pass between the out-buildings and the north-easterly section of the farm. The trees which stood upon the proposed roadway have been felled, and some of the rocks removed. It is hoped to make the way passable before the close of the calendar year.

A concrete sidewalk, nearly nine hundred feet in length and five feet wide, has recently been laid beside the road running from the hospital, over the east lawn, toward the entrance gate. It meets the similar walk which was laid three years ago, and thus completes a continuous foot-path of the kind from the village to the front door of the building. Other parts of the grounds around the hospital, the barn and the stable, have been improved in a similar way.

The lightning-rods originally placed upon the hospital buildings were of iron. They had become, by long exposure, so rusty as to be, if not utterly worthless, unworthy, at least, of confidence as a means of protection. Under these circumstances we believed it most prudent to replace them by a surer safeguard. This has been done by putting up very nearly four thousand feet of a cylindrical copper rod, made by James Fiske & Co., which, judging from appearances, has no superior in the market.

The Superintendent, in view of the prospective needs of the insane of the four western counties of the Commonmonwealth, has, in his report, suggested a means by which those necessities can be supplied. The proposition for an increase of room to meet this already growing want, by the erection of a building upon the southerly part of these premises, is one that commends itself to our judgment, and receives our approbation.

The annual report of the Treasurer has been presented to our board, and, having been audited, is hereto appended.

From the balances of the accounts it appears that, at the close of the official year, Sept. 30, 1882, there were:—

The reserve fund, And cash assets available for futur			
Total,			\$37,111 54
And liabilities (bills payable),			5,712 84
Balance in favor of the hospital,	, .		\$31,398 70

Besides the cash assets, there were on hand purchased provisions and supplies estimated to be worth \$16,697.65, as well as all of the yet unconsumed products of the farm and the garden.

The actual earnings of the hospital during the official year were: —

For State patients, .			•		\$28,284 29
town patients, .					40,178 59
private patients,		•		•	15,188 17
Total					\$83,651 05

In January last, Mr. Asa Wright, the well and widely known Farmer of the institution, resigned his office in consequence of failing health. He was elected to that office before the hospital was opened for the reception of patients, and had the immediate charge of the farm twenty-four years. The skill with which he managed it throughout that long period, has been so generally recognized as to need no setting forth in this place.

The other administrative officers who were here a year ago still remain in charge. Their number has been increased by the election, in July last, of Dr. David G. Hall, as an addition to the medical staff. Dr. Nims now holds the office of Assistant Superintendent.

In the corps of subordinate officers there has been but one change since our last report. Mrs. Ellen R. Sawyer has resigned the place of laundress, and it is now filled by Minnie J. Howes.

The institution and all of its affairs are in a condition no less satisfactory than at the time of our last report.

WM. M. GAYLORD. S. M. SMITH. ADAMS C. DEANE. HENRY W. TAFT. LYMAN D. JAMES.

NORTHAMPTON, Oct. 5, 1882.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE NORTHAMPTON LUNATIC HOSPITAL, SEPT. 30, 1882.

Superintendent and	phy	sicia	n,					per	year,	\$2,500	00
Assistant superinter	nden	t,							46	1,500	00
First assistant phys	ician	,							66	900	00
Second assistant ph	ysici	an,							**	600	00
Treasurer,	٠.								46	300	00
Treasurer, for clerk	c-hire	e an d	pai	d to	a cler	k,			**	200	00
Clerk,									44	900	00
Farmer,									**	480	00
Engineer,									44	900	00
Assistant clerk, .								per	month	ı, 3 0	00
Supervisor (male),									"	35	00
Supervisor (female									**	25	00
Assistant superviso),		•				44	18	00
Seamstress,									"	20	00
Assistant seamstres									"		00
Laundress,				•					"		00
Assistant laundress	3, .						•		44		00
•						•		•	**		00
Assistant baker, .											00
Steward,									44		17
Assistant steward,					•				**	35	
Attendants (male)				•	•		•		46		00
Attendant (male) (•			•	•	44		00
Attendant (male) (•	•	"	25	
Attendants (male)						•			"	23	
Attendant (male) (1),		•						**	21	
Attendants (female					•		•	•	",		00
Attendant (female)	(1)	,			•				"	16	
Attendants (female					•	•		•	"	14	
Night-watch (fema									**	18	
Housework, centre					•	•	•		"	15	
Cooks (female) (2)					•	•		•	"	15	
Assistant cook (ma	le) (1),	•	•	•			•	**	15	
Assistant cook (fen	nale)	(1),		•		•		•	44	14	
Farmers' dining-roo		fe ma	le) ((1),	•	•		•	"	14	
Watchman,				•	•	•	•	•	**	30	
Carpenter,					•	•		per	day,	_	25
Carpenter,		•		•			•	•	"		00
								Dig	itized by	Goo	gle

Painter, .								pe	r month,	\$50	00
Assistant eng	inee	r,							66	32	00
Night engine	er at	nd g	garden	er in	sum	mer,			44	30	00
Coachman,									44	25	00
Farm hand (1),								44	28	00
Farm hands (66	25	00
Farm hand (1									44	23	00
Farm hand (1	ί),								44	21	00

In the warm season we generally hire some farm hands by the day. This year we have four, at \$1.50 per day, without board. They work mostly on improvements of the farm.

INVENTORY OF STOCK AND SUPPLIES

ON HAND SEPT. 30, 1882.

Live stock o	n the	farm	, .								\$5,221	00
Produce of t	he far	m on	n ha	nd,							7,123	50
Carriages ar	ıd agı	icult	ural	imp	oleme	n t s,					3,740	00
Machinery a	nd m	echai	nical	fixt	ures,						9,365	00
Beds and be	dding	in ir	ımat	tes' (lepar	tment	i., .				11,720	5 0
Other furnita	ure in	inm	ates'	dep	artme	nt,					4,780	41
Personal pro	perty	of S	state	in s	uperi	ntend	lent's	depa	artme	nt,	9,406	73
Ready-made	cloth	ing,									2,197	50
Dry goods,											3,656	30
Provisions a	nd gr	oceri	es,								3,853	80
Drugs and n	aedici	nes,									550	00
Fuel, .											6,440	05
Library, .	•		•	•		•	•	•	•	•	800	00
Total											e co 954	70

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

The subjoined schedule presents the financial condition of the institution for the official year 1881-82, in the form adopted in the next preceding year.

		Ass	ETS.						
Three hundred and forty	acres	of la	nd,		\$40	,000	00		
Hospital building,					250	,000	00		
Two dwelling-houses, .					4	,000	00		
Two barns,					5	,500	00		
Stable,					2	2,000	00		
Other buildings,					7	,000	00		
					<u>-</u> -		_	\$ 30 8,500	00
	Per	SONA	L Est	PATE.					
Stock and supplies on h	and, as	s per	inve	ntory	арре	nded	to		
the Trustees' Report,								\$ 68 ,8 54	79
Reserve fund, .								10,000	00
		Reci	ZIPTS.						
Cash on hand Sept. 30,	8 81,							\$5,205	38
Received from the State								29,196	99
from towns,								41,823	
from individus						•		16,327	68
from sales,								2,497	21
from interest,		•						752	61
		Pavi	MENTS					\$95,803	15
1-4 Calanias manas				-				# ac 0 5 6	67
1st. Salaries, wages, 2d. Provisions and s		-		•	•	•	•	\$26,35 6	07
Meats of all						2 076	5.C		
Fish of all k	-					5,978			
Fruit and ve						1,521 205			
rrun and ve	Scenon	cs, .	•	•		2,395 			
Amounts carried for	mvard	!, .	•	•	\$ 10	0,895	98	\$26,356	67

4	maunto i	henerahi	forward,					10 905	0.6	\$26,356	67
А			bread, .					5,443		\$ 20,000	01
	Gra	in and t	meal for	tahla	•			911			
			meal for s			•		2,176			
	Too	enn sena i	and choc	alata	•	•		954			
			molasses,	•	•	•		2,569			
			cheese,		•	•		4,837			
	Sali	t and ot	her groce:	ries,	•	•	•	3,281	94	04.0=4	
	~						•			31,071	
8d.							•	•		3,166	
4th.	Fuel an	d lights	, medical s		•	•		•		8,024	
5th.	Medici	nes and	medical s	uppli	es,	•		•	•	1,648	
6th.			and bed						•	4,034	67
7th.			and trav							346	35
8th.	Ordina	ry const	ruction ar	ıd rep	airs,					2,490	05
9th.	Extrao	rdinary (constructi	ion ar	id rej	pairs.				6,774	48
10th.	Real es	tate (pe	at meado	w),						80	00
11th.	Miscell	aneous e	expenses,	inclu	ding	_					
		Form of	tock,					e 1 040	50		
			•					\$1,040			
			upplies,			•	•	2,584			
							•	750	00		
			expenses,		•	•	•	468			
	5.	Conting	gencies,	•	•	•	•	1,027			
							•		_	5,821	26
			·	IABIL	ITIES.					\$89,814	98
Salari	as and w	ra gas du								- ,	
			e Oct. 1, 1	1882,	,				•	\$3,500	58
		ages du bills du	e Oct. 1, 1						•	- ,	58
			e Oct. 1, 1	1882,	,					\$3,500 2,212	58 26
Miscel	llaneous	bills du	e Oct. 1, 1 e,	1882,	•				•	\$3,500	58 26
Miscel Due tl	ll a neous ne institu	bills due	e Oct. 1, 1 e,	1882, et. 1, 1	•				٠	\$3,500 2,212	58 26
Miscel Due tl	llaneous ne institu om Stat	bills due ition for e, .	e Oct. 1, 1 e, .	1882,	1882 :			\$ 6,955	46	\$3,500 2,212	58 26
Miscel Due tl	llaneous ne institu rom Stat town	bills due ition for e, . ns, .	e Oct. 1, 1 e,	1882, et. 1, 1	1882 :			\$6,955 11,271	46 19	\$3,500 2,212	58 26
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, . ns, . viduals,	e Oct. 1, 1	1882, et. 1, 1				\$6,955 11,271 2,796	46 19 72	\$3,500 2,212	58 26
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, . ns, . viduals,	e Oct. 1, 1	1882, et. 1, 1			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212	58 26
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, . ns, . viduals,	e Oct. 1, 1 e,	1882, et. 1, 1			•	\$6,955 11,271 2,796	46 19 72 00	\$3,500 2,212 \$5,712	58 26 — 84
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, ns, viduals,	e Oct. 1, 1	1882, et. 1, 1			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212	58 26 — 84
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, ns, viduals,	e Oct. 1, 1	1882, et. 1, 1			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712	58 26 — 84
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, ns, viduals,	e Oct. 1, 1	1882, et. 1, 1 			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712	58 26 — 84
Miscel Due th	llaneous ne institu rom Stat town indi	bills due ntion for e, ns, viduals,	e Oct. 1, 1	1882, et. 1, 1			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712	58 26 — 84
Miscel Due tl fr	ne institutom State town indicincter Trea	bills due ntion for e, . ns, . viduals, rest, asurer, S	e Oct. 1, 1	1882, et. 1, 1 			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712	58 26 84 54 70
Miscel Due the free free free free free free free fr	ne institutom Stattown indii inter	bills due	e Oct. 1, 1	1882, et. 1, 1 			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712 27,111 \$21,398	58 26 — 84 54 — 70
Miscel Due the free free free free free free free fr	ne institutom State town indicincter Trea	bills due	e Oct. 1, 1	1882, et. 1, 1 			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712 27,111 \$21,398	58 26 — 84 54 — 70
Miscel Due the free free free free free free free fr	ne institutom Stattown indii inter	bills due	e Oct. 1, 1	1882, et. 1, 1 			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712 27,111 \$21,398	58 26 84 84
Due to fue for Total Total	ne institutom Stattown indi- intercom Tres	bills due	e Oct. 1, 1	1882, et. 1, 1 			•	\$6,955 11,271 2,796 100	46 19 72 00	\$3,500 2,212 \$5,712 27,111 \$21,398 \$95,803 89,814	58 26 84 84 70 15 98
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1882.] PUBLIC	C DOCUME!	NT —	No.	21.	•	1	17
Dividing this sum by 461	.66, the average	numbe	r of p	atien	ts,		
we have the average	e expenditure pe	er patie	nt,			\$194	56
And the average weekly	expenditure, pe	er patie	int, o	f.		3	74
Deducting from the total	l expenditures,					\$89,814	98
The extraordinary expen	nses,	•	•	•	•	6,774	1 8
We have the curr	ent expenses, .	•		•		\$83,040	50
Dividing \$83,040.50 by	461.66, the aver	age nu	ımbe	rofj	pa-		
tients, we have the	average expendi	ture p	er pa	tient,		\$179.8	73
Making the average wee	ekly expenditure	per p	atient	t, .	•	3.4	59
Adding to the current ca	ish expenditures	, .				\$83,040	50
The decrease of persons	al assets,	•	•	•	•	958	8 6
We have the appa	arent necessary	cost for	the	year,		\$83,999	36
Dividing \$83,999.36 by	461.66, the aver	age nu	ımbe	rofj	pa-		
tients, we have, as t	he annual cost o	f each	patie	ent,		\$ 181.	.95
Making the average wee							

PLINY EARLE, Treasurer.

NORTHAMPTON, Oct. 5, 1882.

Having audited the accounts of the Treasurer, we find every entry justified by a sufficient voucher.

ADAMS C. DEANE. WM. M. GAYLORD.

Остовев 5, 1882.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

The annual official report of an institution for the insane, if strictly confined to its legitimate object, a narrative and statistical exposition of the proceedings and results of the official year which it covers, soon becomes almost as uniform and fixed in its general features and character as "The Farmers' Almanac, by Robert B. Thomas," and perhaps quite as monotonous. The writers of those periodical missives may persistently rack their brains in the search for diversity or novelty, but the fruits of their labor are rarely abundant. They may alter the arrangement of subjects as much as they please in the endeavor to produce an apparent variety, but, after all, the same ground must be gone over, and what is at first view gained by such change is more than counterbalanced by the loss in systematic arrangement. "The Farmers' Almanac" would not be greatly improved by a reversal of the order of months, beginning with December and ending with January, or by any alternate, promiscuous, or haphazard selection of them, to be placed in the order of Nature's order of sequence in the months is the succession. best.

There is, in the treatment of the affairs of a public institution like this, a natural and logical sequence of subjects, but little if any less determined than that of the order of time, and he who attempts to disregard it, does so to the detriment not of himself alone, but also of his readers, — if he be sufficiently fortunate to have any. The horse at the primitive cider-mill of our fathers, and the prisoner upon the steps of a tread-mill will both find it to their interest to pursue their course patiently, agreeably to the "inevitable"

logic of events," rather than to attempt to reverse the order of things or to arrange them promiscuously in the hope to avoid monotony.

For the reasons given I begin my subject at its beginning, by a tabular statement of the movement of the population of the hospital, and the general results, in regard to the patients, of the proceedings of the official year.

1. General Statistics, 18	881⊸	32.
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	Males.	Females.	Totals.
Patients in hospital, Oct. 1, 1881,	229	234	463
Admitted within the year	62	62	124
Whole number of cases within the year, .	291	296	587
Discharged within the year,	62	66	128
Viz., as recovered,	13	15	28
as much improved,	4	9	13
as improved,	7	14	21
as unimproved,	14	13	27
as not insane,	0	1	1
Deaths,	24	14	38
Patients remaining Sept. 30, 1882,	229	230	459
Viz., supported as State patients,	85	76	161
as town patients,	118	126	244
as private patients, .	26	28	54
Number of different persons within the year,	289	291	580
admitted,	61	58	119
recovered,	13	15	28
Daily average number of patients,	230.52	231.14	461.6

The whole number of admissions within the year was, of men 62, and of women 62; a total of 124. This is the number of *patients* or *cases* admitted, and it is worthy of remark that the two sexes were equal.

One of the men and 3 of the women were admitted twice each, and consequently the 4 persons appeared as 8 patients. This reduced by 4 the number of persons admitted. Another woman, who was in the hospital at the beginning of the official year, was discharged twice, as unimproved, and admitted twice in the course of the year, and is now here. As she was admitted twice she counted as 2 patients admitted. The number of persons admitted was thus further reduced by 1. Hence the number of persons admitted

was 119, or less by 5 than the number of patients or cases admitted.

Of the persons admitted, 61 were men and 58 women.

Including those who were already present at the beginning of the year, the whole number of patients in the house, in the course of the year, was 587, of whom 291 were men and 296 women. One of these, a man, was discharged and again admitted. He was thus counted as 2 patients. total number of persons in the house within the year was thus diminished by 1. The woman above mentioned, who was here at the beginning of the year, but was discharged twice and admitted twice within the year, was, in regard to the whole number in the house, counted three times. Although but 1 person she was 3 patients—1 as being here at the beginning of the year, and 2 more by her duplicate admissions. The number of persons was thus reduced by 2. The 4 other persons admitted twice each within the year, as mentioned above, were counted as eight patients. total number of persons was still further reduced by 4. Consequently the whole number of persons in the house within the year was smaller by 7 than the whole number of patients or cases. The whole number of persons was 580, of whom 289 were men and 291 women.

Of all the persons admitted twice each, no one was discharged as recovered on the first of those two admissions.

Of the 119 persons admitted, 20, or nearly one-sixth of the whole, have been treated at the hospital more than once each. Thirteen of them, of whom 8 were men and 5 women, have been admitted twice each; 1 woman three times; 1 man and 2 women five times each; 1 man six times; 1 man nine times; and 1 woman thirteen times. The two last-mentioned are brother and sister.

Of the 13 who have been here twice each, 4 men and 1 woman, a total of 5, were discharged recovered on their first admission. Two men and 2 women were discharged as much improved; 2 women as improved; and 2 men as unimproved.

The woman who has been admitted three times, was discharged recovered on both the first and the second admission.

Of the 3 who have been here five times each, the man was discharged as recovered twice, and improved twice; one wo-

man as recovered four times; and the other as unimproved four times.

The man who is here for the sixth time, was discharged as recovered on every one of the first five admissions.

The man who has been received nine times, had been, previously to the last admission, discharged as recovered four times and improved four times.

The woman who has been here thirteen times, had, before the last admission, been discharged as recovered nine times, and as improved three times.

From these statistics it will be perceived that, in the course of the official year, no less than 12 persons were received who had, in some preceding year, been discharged as recovered, and that the whole number of those recoveries was 33.

The number of patients or cases admitted, was larger by one than in the next foregoing year; but the number of persons admitted was smaller by one. The number remaining in the hospital at the close of the year is less by 4 than it was at the end of September, 1881. This reduction was not the result of what may be termed the natural movement of the institution's population; but was caused by the transfer of 10 of the female patients to the State's receptacle at Tewksbury.

The daily average number of patients in the hospital exceeded by 10 that of the next preceding year, notwithstanding the removals just mentioned. The constant tendency to an accumulation of patients permanently resident in the charitable establishments of the Commonwealth is thus once more illustrated.

STATUS OF PATIENTS.

At the time of admission into the hospital of the patients received in the course of the official year, the Commonwealth assumed the responsibility for the maintenance of 40 of them. The cost of support of 65 was charged to cities and towns; and that of 19 to the agents, guardians or relatives of the individuals respectively. Subsequently, these expenses were transferred from the State to cities and towns in four instances, and from an individual to a town in one.

The interests of the Commonwealth, as well as of the cities and the towns, in relation to this matter, are very carefully

guarded by the agents to whom the business is entrusted. While, on the one hand, the Superintendent of Indoor Poor, with his agents, is constantly engaged in the search for "settlements," to the end that the treasury of the State shall not be burdened with expenses which, under the law, do not belong to it, the overseers of the poor are ever watchful, perhaps quite enough so, to protect the cities and towns from any cost which will be paid from any other source. From this opposition of interests often springs a protracted struggle in the attempt at adjustment, and, as seen from the point of view of this hospital, the officers of the State are often put to no inconsiderable labor and expense by the unwillingness of the city and town authorities to acknowledge a settlement which is sufficiently apparent to a disinterested person.

The whole number of patients discharged, whether by the proper authorities or by death, was 128. The support of 42 of these was drawn from the State. That of 64 was paid by cities and towns, and that of 22 from private funds.

Four hundred and fifty-nine patients remained in the house at the close of the official year. One hundred and sixty-one of these are wards of the State, and 244 of cities and towns; while 54 derived their support from their own property or other private sources.

The gradual but sometimes rapid change which for many years has been constantly taking place in the relative proportion of the different classes of patients, as was shown somewhat in detail in the report for 1880-81, still continues. Its most striking characteristic, for the last few years, is the diminution of the beneficiaries of the State and the increase of those of cities and towns. The following table exhibits the weekly average of the several classes in each of the last two official years:

		1880-81.		1881-88.					
	Males.	Females.	Totals.	Males.	Females.	Totals.			
State patients, .	96 84	83 98	180.82	88.71	78.13	166.84			
Town patients, .	101.63	112.52	214.15	112.78	125.46	238 25			
Private patients, .	29.73	27.46	57.19	28.98	27.53	56.52			

It is here shown that the average number supported by the State was reduced by fourteen from that of the next preceding year, while that of the town patients was augmented by twenty-four. The difference in the average number of private patients in the two years is very small.

RECOVERIES.

Judging in accordance with our standard of mental health, and our opinions in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncrasy, education and habits, there were twenty-eight patients who left the hospital in the course of the official year, whose condition was such that they might safely be recorded as recovered. Thirteen of them were men and fifteen women. No one was discharged as recovered more than once, and consequently the number of persons was the same as that of patients. With but a single exception, all the recoveries took place in persons who were inmates of the hospital for the first time. This is an occurrence so unusual as to be worthy of remark. In the exceptional case the patient, a woman, was here upon her thirteenth admission. had previously been discharged twelve times, nine times as recovered, and three times as improved. She has now contributed ten recoveries to the statistics of the institution, and as her disease has established a character of recurrence, it is not improbable that these contributions will be continued.

The number of recoveries exceeded that of the next preceding year, and was equal to 23.93 per cent. of the persons admitted. Regarded as a whole they were, perhaps, what is termed "better" recoveries than those of the foregoing year. In a fair proportion of them the return to a normal mental condition appeared to be perfect, and gave good promise of the stability and permanency of that condition. But, as usual, there were quite enough of which this cannot truthfully be said. In five or six instances the disease is sure to return, if the lives of the persons are much prolonged; and in several others a recurrence of it would be no occasion for surprise. No one of those who were discharged recovered has yet returned to the hospital; but in one of the most favorable and most promising cases, the patient suffered

from a relapse within a few months after her removal, and ended her life by suicide at her home.

The number of curable cases admitted was somewhat larger than in any other annual period for several preceding years. It is sincerely to be hoped that this is an indication of a change of practice among the people, whereby persons who are proper subjects for treatment at an institution like this, will be brought to the hospital in an earlier, and consequently more curable stage of the disease. Unfortunately, however, the teachings of long experience induce us to believe that it was the accident, or the incident of the year, rather than a favorable omen pointing to wiser action in the future.

DEATHS.

In the experience of institutions for the insane, it is not uncommon to find that, even when no epidemic disease has prevailed, and there has been no unusual number of acute cases terminating fatally, there are years in which the number of deaths is largely - sometimes very largely - increased. For several successive seasons the mortality may be small, but at length there comes a year in which the patients with chronic mania or dementia, the old cases which have long peopled the wards, the debilitated men and women who, with constitutions broken down have still clung to life with a marvellous pertinacity that has defied all professional and non-professional prophecy, succumb to their disease, almost, apparently, as if by common consent, and pass out of earthly existence. There are also years in which, in relation to the subject before us, it may very appropriately be said, that "it is the unexpected that happens," and the medical record is laden with an accumulation of unanticipated deaths.

The history of the year just closed is marked to some extent with these characteristics, and the mortality was increased, not to a very remarkable extent, but to a point above the average at this institution.

The number of deaths was 38, of which 24 were of men and 14 of women. In no less than nine instances, or nearly one-fourth of the whole number, the disease that terminated life was that common scourge, consumption. There were 4

deaths from epilepsy, 3 from paresis, or the general paralysis of the insane, 2 from the metastasis of erysipelas, 3 from marasmus, 2 from wounds self-inflicted at the hospital, and 1 from a similar wound before the admission of the patient. The remaining 14 were the results of as many different diseases, the record of which may be found in the table of mortality.

As above intimated, the deaths of three of the patients were the consequences of suicidal acts. In two of them, both of them men in whom no tendency to self-destruction was either known or suspected, the act was committed here; but in the other, a woman, it was done at her home. The first two cases were investigated by the Medical Examiner.

The whole number of deaths by suicide committed at the hospital to the present time — twenty-four years from the time it was opened — is 18. In 12 of them the patients were men; and in 6, women. Eleven of them occurred within the first twelve years of the period, and 7 of them in the last twelve. The relative proportion in the two subordinate periods, as compared with the number of patients, differs more widely than is indicated by these numbers. The average number of patients resident in the hospital during the first twelve years was only 347.61, while in the last twelve it was 452.18. Hence we derive the fact that, during the first of these periods, the relative proportion of suicides was a trifle more than twice as great as during the last, or as 317 to 154.

The experience of the past year, in relation to the comparative mortality of the sexes, confirms that of most of the antecedent years in the history of the hospital. Of the 291 men-patients treated in the course of the year, 24, or 8.24 per cent., died; but of the 296 women-patients, the deaths were only 14, or 4.73 per cent. Calculated in this way, then, the mortality of the men was nearly twice as great as that of the women. Calculated upon the daily average of patients resident in the hospital, the percentage for men was 10.41, and for women 6.05, the difference being less than by the other method.

In the course of the last twelve official years, the number of deaths was, of men 219, and of women 161; a total of

370. But the average number of women in the house was larger by about 14 than that of men, consequently the relative mortality was much the largest in men. Had this mortality been as large in women as in men, the deaths of women would have been 222, instead of 161.

Eight of the patients who died were beneficiaries of the State, and 22 of cities and towns, while 8 were supported by private funds.

The table subjoined shows the annual mortality from the opening of the hospital to the close of the official year included in this report.

Deaths and their Ratios from Sept. 30, 1858, to Oct. 1, 1882.

OFFICIAL	Whole No. of	Daily Average		DEATES.		Per cent. on Whole No.	Per cent. on Daily Average	
YEAR.	Patients.	Patients.	Men.	Women.	Total.	of Patients treated.	No. of Patients	
1858-59,	313	229.55	7	12	19	6 07	8.27	
1859-60.	398	255.96	9	18	27	6.78	10.54	
1860-61,	434	314.26	15	15	30	6 91	9.54	
1861-62,	442	313 80	9	10	19	4.29	6.05	
1862-63,	470	355.28	19	7	26	5 53	7 31	
1863-64,	475	357.63	17	30	47	9.89	13 14	
1864-65,	469	342.40	17	24	41	8.76	11.97	
1865-66,	488	376.35	18	13	31	6.35	8.23	
1866-67,	543	401.03	23	24	47	8.65	11.71	
1867-68,	565	413.41	25	18	43	7 61	10.40	
1868-69,	590	405.10	13	12	25	4.23	6 17	
869-70,	604	408 83	22	11	33	5.46	8.07	
1870-71,	616	421.90	16	12	28	4.54	6 64	
1871-72,	619	428.72	19	18	37	5.97	8.63	
1872-73,	614	437.23	13	8	21	3.42	4.80	
1873-74,	626	469.54	14	11	25	3.99	5.32	
1874–75,	629	475.35	23	18	41	6.52	8.62	
1875–76,	629	474.21	18	19	37	5.88	7.80	
1876-77,	608	476.16	21	21	42	6 96	8.82	
1877–78,	551	442.43	14	9	23	4.17	5.19	
1878-79,	535	436.73	14 ·	y	23	4.29	5.27	
1879-80,	559	450.51	17	12	29	5.19	6.44	
1880-81,	569	451.79	16	10	26	4.57	5.75	
1881–82,	587	461.66	24	14	38	6.47	8.23	

As will be perceived from this table, the proportion of deaths exceeded that of any preceding official year since that of 1876-77. It was larger, although not greatly so, than the average.

As calculated upon the whole number of patients under treatment, the mean or average mortality was, —

For the whole period of two	enty-	four y	years,		5.94 p	er cent.
For the first twelve years,					6.71	"
For the last twelve years,					5.16	46
While for the last year the	mort	ality	was		6 41	64

Calculated upon the daily average number of patients in the hospital it was, —

For the whole period, .	•				8.04 per cent.
For the first twelve years,					9.28 "
For the last twelve years,					6.79 "
While for the last year the	mor	tality	was		8.23 "

The latter method of calculation is considered as the most accurate. By either method the proportion of deaths in 1881-82 is shown to have exceeded by a fraction the mean mortality of the whole period, as well as of the last twelve years; but was smaller than that of the first twelve years.

The difference between the mortality of the two half periods continues to be remarkable. The actual number of deaths in the first half was 388, and in the last half 370. But the number of patients during the last half was much larger than in the first, and consequently the proportion of deaths was much less. Had this proportion in the last half been equal to that of the first, the actual number of deaths would have been 505 instead of 378.

One young woman, laboring at the time of her admission under an acute and apparently fatal disease, was afterwards taken from the hospital, to the end that she might die at home. Her decease occurred not long afterwards. No other patient was removed under similar circumstances within the year.

WORSHIP AND ENTERTAINMENT.

On the afternoon of every Sabbath within the year there was an assembly of patients for divine worship in the Chapel, the services, as usual, being generally conducted in irregular rotation by the pastors of several of the churches of different denominations within the town, but in a few exceptional instances by ministers from other places.

In the evenings of no less than two hundred and seventy-

six secular days, a similar assembly gathered for purposes which are indicated by the following table:—

SCHEDULE OF EXERCISES IN THE CHAPEL.

	Total,		365	days.
	No assembly,	•	. 37 ——	
	Quadrille parties,		. 17	44
	(d) Social Gatherings:—			
	Exhibition of ventriloquism,	•	. 1	61
	Recitations,	•	. 2	"
	Concert and recitations,		. 1	44
	Concerts of vocal and instrumental music,	•	. 4	41
	Pictures shown with the stereopticon, .		. 6	"
	(c) Other entertainments:—			
	On astronomy,	•	. 1	•6
	(b) Lecture, opening and closing with sacred mus	ic:—		
	Miscellaneous selections of prose and poet	ry,	50	41
	Miscellaneous selections of poetry, .		66	"
	Miscellaneous selections of prose, .		73	**
	The Bible and selections of poetry, .		21	"
	The Bible and selections of prose, .		. 8	"
	The Bible,		26	44
	(a) Readings, opened and closed with music: -			
2.	Exercises on Secular Evenings, -			
	Divine worship,		52 (lays.
1.	Exercises on the Sabbath, -			

As will be perceived, there were but thirty-seven days within the year upon which no gathering of the inmates took place. I know of no other similar institution, either in the United States or in foreign countries, in which such assemblies are of so nearly constant occurrence. The practice in this respect differs very greatly. In some institutions the patients are never thus called together; while in others the frequency with which it is done varies from the extreme just mentioned to the opposite, which, as is here assumed, is shown by the record of this hospital. There is perhaps a no less diversity in the character of the exercises. There are hospitals at which there are no assemblies for purposes other than worship, and, on the other hand, there are those at

which there are none except for social recreation and amusement. These differences have their origin in part in the temperament, the opinions and the beliefs of the officers of the respective institutions, in part in the class of society from which the patients are mostly drawn, and in still other part, in the habits, tastes, manners and customs of the people among whom the different establishments are situated. Insane men and women, wherever they may be, are generally interested, entertained and amused by the same influences which interested, entertained or amused them before they became insane. For this reason, and with a knowledge of the characteristics of the several nationalities, no reasonable person would expect to find uniformity of practice in this department of what is called moral treatment, in the institutions of the Germans, the French, the English, the Scotch, the Irish, and the Americans. So far as the nature of the exercises is governed, in the institutions of any given country, by the personality of the Superintendent - and this is, undoubtedly, to a very great extent — it may be assumed that, how much soever they may differ in different institutions, these exercises are, at each one of them, such as, in the opinion of that officer, will best minister to the wants and necessities of his patients, and thus most largely contribute to their satisfaction, and promote their restoration to mental health.

FARM.

Of the twenty-four agricultural seasons which have passed since the hospital went into operation, no preceding one was so unfavorable for products of the farm and the garden as that of 1882. It opened with the promise of sufficiency, if not of abundance, and was faithful to that promise until near the close of June, although, at that time, all vegetation was unusually backward.

In the early days of July began a drouth which, for duration and severity, is almost, if not quite, without a parallel in this region. It continued through two long, and, to the agriculturist, very dreary months, with but one relieving fall of rain in sufficient quantity to reach the roots of vegetables; and in that exceptional instance the ground was wet to a depth of but from three to four inches. Covering, as it

did, so long a period of the most important time of growth, the effect of the drouth could not fail to be otherwise than disastrous. The twenty-acre garden, near the hospital, never before had so sorrowful an aspect, and the chief wonder is that, despite the scorching sun and the dearth of water, it could still furnish enough of kitchen vegetable to preserve, to some extent, the semblance of the summers of the past.

The grass roots were well preserved through the winter, and the first growth of nearly all that was mown in June was as large as in any former year. That which was cut later was mostly deficient in quantity. Still the quantity of the product of hay fell short by only about eight tons of that of 1880, the largest crop ever produced upon the premises. But the after-growth was an almost utter failure. In 1880 the harvest of rowen was thirty-eight tons; this year it was six tons. This deficiency of one of the best of milk-producing foods will be felt during the coming winter.

In no one of the next preceding three years was the product of potatoes less than 3,000 bushels; this year it was 1,200 bushels.

Of apples there are more than in 1881, but nothing like the enormous harvests of 1878 and 1880. This is one of nature's alternate productive years; but, though blossoms were plentiful, the fruit did not set abundantly, there was a large falling of it when small, and subsequently another falling, enforced by the drouth.

LIST OF PRODUCTS.

Hay (first growth of ho	me	farm),	1241	tons	, at \$	17,			\$2,112	25
Hay (after-growth of h	ome	afarm),	6 to	ns, a	t \$17	, .			102	00
Hay (south lot), 271 to	ns, e	at \$17,							467	50
Hay (Clarke orchard),	121	tons, at	\$17,						212	50
Corn-fodder, dry, 12 tor	18, .								60	00
Oat-straw, 5 tons, .									60	00
Corn, 125 bushels, .									112	50
Potatoes, 1,200 bushels,									960	00
Oats, 200 bushels, .									100	00
Broom-seed, 25 bushels	, .								15	00
Broom-brush, 500 poun	ds,			•	•	•	•	•	30	00

Amount brought	foru	vard,					\$4, 231	75
Carrots, 175 bushels,							70	00
Beets, 600 bushels,							300	00
Onions, 150 bushels,							150	00
Turnips, 275 bushels,							110	00
Parsnips, 60 bushels,							30	00
Beans, Lima, in shell		bush					123	υ0
Beans, common, in s							28	00
Beans, string, 31 bus							62	00
Beans, Lima, dry, 2 l							8	00
Pease, green, in pod,							69	75
Sweet corn, green, in							112	50
Tomatoes, 521 bushe							52	50
Lettuce, 103 bushels,							97	25
Cucumbers, 31 bushe							31	00
Squashes, summer, 2		shels					32	50
Squashes, winter, 12							72	00
Melous, 1,420 pounds							21	30
Asparagus, 211 bush							64	50
Pie-plant, 57 bushels	١,						71	25
Cabbages, 2,000 head	ls,						140	00
Currants, 17 bushels.							51	00
Apples, 500 barrels,					•	٠.	1,000	00
Pears, 4 bushels,							12	00
Quinces, 2 bushels,				•.			6	00
Veal, raised here, 48	8 po	unds,					52	48
Pork, 14,414 pounds,							1,153	12
Pigs sold, 96, .							306	50
Pigs, roasting, 2, Turkeys, 51 pounds,							5	00
Turkeys, 51 pounds,							8	70
Chickens, 37 pounds	,						5	90
Heads and plucks,							23	50
Eggs, 109 dozen,							29	86
Milk, grass-fed, 20,49	92 qı	uarts,		:			1,024	60
Cider, 40 barrels,							80	00
Calf-skins,							6	25
Young calves sold,							38	50
Wood sold, .							289	50
							\$9,970	21

The deficiency from the next preceding year, in the total valuation of products, as here presented, is \$1,606.07; but this by no means represents the actual reduction of value for home consumption, because many of the products are appraised, this year, at a higher money value than they were in 1881. Setting aside apples, of which this was the bearing year, and consequently cannot properly be compared with

the foregoing year, as affected by the drouth, and appraising the products of the two years at the same cash value, the deficiency this year, as compared with the last, is not less than \$3,000.

The herd of swine upon the premises has always been a prominent feature in the agricultural department of the establishment. Much attention has been paid by the farmer to the improvement of this stock. The "Hospital Breed" has become favorably known in the surrounding country, to such an extent that it has generally been impossible to supply the demand for pigs.

The number of hogs fattened and slaughtered in the course of the official year was twenty-eight. The weight of each, when killed and dressed, is given in the following list: 622, 512, 538, 582, 598, 525, 581, 488, 595, 455, 555, 358, 460, 492, 698, 492, 590, 543, 667, 502, 462, 412, 481, 340, 570, 336, 488, 472. The largest weighed 698 pounds, the smallest 336. The average weight of the largest ten of them was 603 pounds, and that of the largest five, 636 pounds. The aggregate weight of the whole was 14,414 pounds. This was not so large by about 1,200 pounds as the product of the next preceding official year; but in that year the number of animals slaughtered was larger by five than in the year covered by this report.

The quantity of pork produced is, perhaps, a sufficiently accurate indicator of the development of the farming operations during the last eighteen years. In the five official years from 1864–5 to 1868–9, inclusive, the average product was 7,069 pounds; whereas in the same number of years from 1877–8 to 1881–2, inclusive, it was 14,554 pounds. The quantity was more than doubled. The product of the last year not only furnished all the lard used in the hospital, but left a surplus of over 800 pounds. This, together with about 500 pounds of salt pork, has been sold.

Calves are rarely, and only for exceptionally good reason, raised; and but very few are kept until of sufficient age for slaughter. They are generally sold when quite young, on the presumption that the milk which they would consume is more valuable, for hospital purposes, than the meat which

they would produce. This accounts for the smallness of the quantity of veal in the foregoing list.

The quantity of milk which can properly be considered as a direct product of the farm was, as is above stated, 20,492 quarts. This is but one-fourth of the actual quantity produced, which was 81,968 quarts. It is estimated that threefourths of this was derived from the hay, grain and roots grown upon the farm, and the value of which had already been placed in the list. If a farmer could sell a bushel of corn for a dollar, then sell the milk produced from that corn for another dollar, then sell the butter produced by that milk for seventy-five cents, and finally sell the manure derived from the consumption of the corn for twenty-five cents, he might properly consider his corn well marketed. He could complacently congratulate himself upon the profits of his business, and lift the mortgage from his farm - if there was one to be lifted. And yet we occasionally meet, in the annual reports of public institutions, lists of farm products made out precisely upon that principle.

The stock now upon the premises consists of 8 horses, 8 oxen, 1 bull, 31 cows, 1 heifer, and 132 swine, together with about the usual number of domestic fowls.

HOW THE HOSPITAL IS SUPPORTED.

The following financial exposition is the same that was published in the annual report for 1880-81, with the exception of changes necessary for its adaptation to present circumstances. The form and the language are preserved, in the belief that no alterations in these respects could increase the brevity of the article, and, at the same time, retain its comprehensiveness and its clearness of statement.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the funeral expenses of State patients who die in the hospital, and whose remains are not removed for burial. The receipts from the last-mentioned source during the past year were eighty dollars.

For the entire support of State patients, including clothing

and all loss from breakage and other kinds of destruction, the hospital received \$3.50 each per week from the treasury of the Commonwealth, from April 1, 1870, to April 1, 1879. For one year after the latter date it received but \$3 each per week; and since April 1, 1880, it has received \$3.25 each per week. This is the compensation fixed by statute law. One hundred and sixty-one, or a trifle more than one-third, of the inmates now belong to this class. During the past year the weekly average of them was 36 per cent. of the whole.

For town patients it has received, and now receives from the treasuries of the towns respectively in which these patients have legal settlements, the same sum per week as from the State treasury for State patients; but the towns clothe their patients, and remunerate the hospital for damages done by them. More than one-half of the inmates are now in this class. The weekly average of them for the year was nearly 52 per cent.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1882, was \$5.069 each per week. Clothing and damages are extra charges. The weekly average of these patients during the past year was a fraction over 12 per cent., or about one-eighth of the whole.

The average weekly pay per capita charged by the hospital for all its patients—State, town and private—in the course of the year, is \$3.484. Such are the pecuniary resources of the institution. We turn to the results of

THE FINANCE OF THE LAST SEVENTEEN YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its favor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of \$5,000 in two appropriations, for specific purposes, — one of \$2,000 and the other of \$3,000.

As an offset to the \$5,000 bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and fifty acres, the total cost of which was

\$25,670. The State then has in this way alone been overpaid for its bonus in the sum of \$20,670.

The amount paid by the hospital for repairs and improvements in the course of the seventeen years, from Sept. 30, 1865, to Sept. 30, 1882, is \$200,986.91.

The surplus of cash assets now on hand, including the reserve fund, is \$31,398.70, or \$31,096.66 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing, now on hand, are estimated to have cost \$16,697.65. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$14,197.65.

The value of household furniture in the hospital is, at a low estimate, at least \$10,000 greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called \$8,000. Collecting these several sums the account of debt of the Commonwealth to the hospital appears to be as follows:—

Excess of cost of land over direct bonus,			\$20,670 00
Repairs and improvements,			200,986 91
Excess of present cash assets,			31,096 66
Increase of provisions and supplies, .			14,197 65
Increase of furniture,			8,000 00
Total,			\$274,951 22

The necessary current repairs of the buildings may be estimated at \$3,000 annually. Deducting this sum for each of the seventeen years since Sept. 30, 1865, a total of \$51,000, there is a remainder of \$223,951.22. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

In connection with the above exposition, it may be interesting to know to what extent the tax-payers of the State have contributed to the institution. From a list, furnished by the State treasurer, of all the appropriations made either for the construction, the repairs, or the improvements of the hospital, I find that, from the time of the passage of the act

authorizing its erection down to the present day, it has cost the people of the Commonwealth only three hundred and seventy-five thousand five hundred and fifty dollars (\$375,550).

PROSPECTIVE IMPROVEMENTS AND ENLARGEMENT.

Notwithstanding the many alterations, improvements and additions to the hospital since it first went into operation, it has not yet attained that degree of excellence as a complete establishment, of which it is susceptible. Its Trustees and administrative officers need not abandon themselves to despair, in the fear of an approaching time at which there will be nothing to do but to attend to the daily operations of a perfect institution.

The principal building is now in excellent repair. condition, internally, is far better than at the time of its opening for the reception of patients, although it was then considered as completed. The floors of all the halls, with but one exception, as well as of many of the single rooms and the larger dormitories, have been relaid in a much better style than at first, and numerous other changes have been made which improve the appearance and increase the convenience of the edifice. The ventilation was always good, though not of the best. It has been bettered by the placing of the large ventilators upon the roof, and is now really deficient only in the third or retreating section of either wing, and even there not greatly so. The halls in those sections have no window at either end, but are closed by partitions with doors by which entrance is gained to adjoining apartments. At the eastern extremity, those apartments are occupied each by three attendants. The halls are not only deficient in ventilation but, particularly those of the northerly wing, are not well lighted.

Change in the Third Halls.—The most important structural change still desirable within the building, is in these "third halls," and for the reasons alleged. By a removal of the partitions between them and the adjoining attendants rooms, making those rooms in each instance a part of the hall, each hall, at its easterly end, would have the additional light and increased facility of ventilation furnished by two

large windows. By a more expensive alteration each hall might be extended, at its westerly end, to the "fourth hall," throwing the two into one; and, by the removal of the wall enclosing a lodging room for one patient, even to the outside wall of the building, where there is now one window, but where there might be two, corresponding with those at the eastern extremity. These changes being made, the third halls would be some of the pleasantest and most healthful in the hospital. But the making of them would require the sacrifice of rooms now occupied by twenty-four persons, eighteen attendants at the eastern extremity and six patients at the western. This reduction of accommodations can hardly be afforded at the present time; and hence it will probably not be expedient to make the change until after the construction of the "annex" soon to be mentioned.

Mattress shop, Wood-room, &c. — All of the beds and mattresses used in the hospital are made and repaired upon the premises, not less than nine-tenths of the work being done by patients. The room now used for this purpose is in the basement, and was not originally intended for use otherwise than as a store-room. Its ceiling is low, and the ventilation imperfect. A further and quite as great an objection to it is that it is beneath the patients' halls. The only approach to it is through some of those halls, which are consequently soiled by the carrying of materials. Worse still, the fine dust from the hair and husks finds its way into the halls, covering floors and furniture, and rendering the air unwholesome. It is much to be desired that a larger, more convenient and more healthful shop should be constructed.

The farm now supplies, and, if properly managed, will continue, for time indefinite to supply, all the wood required in the bakery. It is, therefore, the best economic policy to continue the use of wood, instead of substituting it by coal, as a fuel in that department. But the only suitable place for the wood is, like the mattress-shop, in the basement of the north wing. There are very serious objections to such a store-room so situated; and a better one in a safe place would relieve responsible officers of no little anxiety.

A room for the housing of two large hose-reels, at a place easily and quickly accessible from every part of the hospital

occupied by men, is another desideratum. The place where they are now stored is needed for other purposes.

In view of these several deficiencies, and still others of minor importance, I would invite your board to the consideration of the expediency of erecting at no distant day, in the vicinity of the scullery, a brick building two or three stories in height, within which all the wants mentioned or alluded to might be supplied.

'Annex. - About twenty-seven years ago, when this hospital was in process of construction, one of the newspapers or western Massachusetts advocated a suspension of the work upon it because it would never be needed. Since that time not only has this building been completed and occupied for twenty-four years by an average of more than four hundred patients, but other similar institutions, with accommodations for no less than eighteen hundred more insane persons, have been erected by the Commonwealth. All of these are now essentially full, and the call for still more is beginning to be heard. This hospital has already become inadequate to the needs of the most westerly four counties of the State; and the time is rapidly approaching at which some further provision must be made, or the policy already begun of removing its surplus population to the more easterly establishments must be continued. But those establishments will soon become so crowded as to be incapable of receiving them. New structures must inevitably be erected somewhere; and it appears to me that not only the most proper, but the most economical course to be pursued by the State government is, to give to these western counties all of their required accommodations of this kind within their own limits. Assuming that such will be the decision of the State authorities, the question immediately arises, By what method shall further provisions be supplied? Shall the Northampton Hospital be enlarged, or shall a smaller institution be established in another place? Prior to an attempt to answer these questions, permit me, in order to prevent any misunderstanding, to express my belief in the superiority of small institutions over large ones, wherever, as here, all classes of the insane are domiciled together under one roof, and that, if there were to-day no institution of the kind within the State, and

it were necessary immediately to construct a number of them sufficient for the three thousand insane persons now confined in our hospitals, I would do it by ten or twelve establishments judiciously distributed throughout the State, and not by the five large ones as and where they now exist. By such distribution one of them would be placed in Northampton. The questions may now be answered as I would answer them; and this shall be done without an elaborate argument.

This hospital may be so enlarged as to give to it the combined advantages of both a large and a small institution. should be done, not by an addition to the present building, but by an "annex," not directly affixed, but, in the phrase formerly much used by the Germans, relatively united to it. A new block, designed very nearly as if it were to be an independent establishment, but without barn or stables, might be erected upon the so-called south lot, which consists of the two tracts of land purchased a few years ago - one of Mr. Welton and the other of the late Capt. Samuel Par-This lot contains not far from fifteen acres, and is an extension of the hill or ridge upon which the hospital now stands. All of it is under cultivation, and upon the two sides adjoining the roads it is enclosed by an iron fence. is believed that in all western Massachusetts there is no fitting situation more beautiful than this, or combining greater facilities for the easy and economical administration of a hospital for the insane. Its location is salubrious, its water supply sufficient and readily obtained, its perfect drainage of easy accomplishment. Not the least of its advantages, in a pecuniary point of view, is the fact that it would require comparatively little grading.

The building, if erected, would be almost directly south of the present one, the central front doors of the two being distant, each from the other, about ninety-five rods, or a little more than a quarter of a mile. It should front due east, or very nearly so. The central or administrative block, with one wing or section of a wing for either sex, might be first erected, and extensions postponed until they should become necessary. These extensions might consist of additional sections of wings, or of disconnected "cottages," as may be considered the most desirable.

This "annex" being erected and ready for service, should become the "prefix" of the institution. The Superintendent and some of the other officers should reside in it, and here the recent or curable cases should receive their treatment, while those that are chronic and incurable should be domiciled in the present larger edifice.

Such are the outlines of the addition which I would propose for this hospital. It should have its own heating apparatus, kitchen, and perhaps bakery; but, as before intimated, the larger outhouses may be dispensed with. A very large part of the domestic work could be performed by patients judiciously selected from the incurables.

STUDIES RELATIVE TO THE CURABILITY OF INSANITY.

A discussion of the extent to which mental disorders are amenable to curative treatment appears to have become an almost stereotyped chapter in the general form of the annual report of this institution. It is to be hoped, it is even believed, that it is not the least useful chapter; and it is no unfounded assumption to claim that it has already been instrumental in the correction of error and the dissemination of truth.

Although briefly touched upon in some of the earlier years, the subject of curability was first somewhat elaborately treated in the report for the official year 1875-76. Within four years from that time the conviction had become so strong in the minds of the members of the State Board of Health, Lunacy and Charity that the long pursued method of reporting the statistics of the hospitals for the insane was so imperfect as, in some respects, to deceive rather than to enlighten, that they proposed for adoption by the institutions within the State an almost entirely new series of tables, the preparation of which they had procured. This proposition was adopted, not alone at the State hospitals, but at the McLean Asylum and the City Asylum of Boston.

The reports of two official years since that time have been published, and those of the third, which has just expired, will doubtless be in print before the commencement of the next session of the legislature. We have already, then, in Massachusetts, the results of a three years' experience under

the new order of things which was introduced in consequence of these discussions. That period is sufficiently long to furnish material from which, as premises, conclusions entitled to a very considerable degree of confidence may be drawn. Drs. Park, Brown and Goldsmith, of the three hospitals at Worcester, Taunton and Danvers respectively, have very courteously furnished me, in advance of publication, with the statistics of those institutions for the year recently elapsed. I propose to pass in review this new material from the four State establishments, and endeavor to ascertain its teachings.

It should be stated that the figures of the statistics relate to persons and not to cases, the same person not having been counted twice within either year, whatever might have been the number of his admissions. It is possible that, in a few instances, the same person was admitted in more than one of the years; but, if any such there were, the number is not sufficient to materially affect the results.

<i>1</i> .	Admissions	of	Persons	in	Three	Official	Years.
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HOSPITALS.						1879-80.	1880-81.	1881-82.	Totals
Worcester,						222	237	304	768
Taunton,						184	267	237	688
Northampton	,				.	115	120	119	354
Danvers,	•	•	•	•	•	571	488	507	1,566
Totals,						1,092	1,112	1,167	3,371

The principal value of this table is in its exhibition of the progressive increase in the number of persons admitted to the hospitals. In the two years intervening between the first and the last report, that increase was seventy-five (75),—twenty (20) in the first year and fifty-five (55) in the second. This ratio of increase, if continued, would double the number of persons admitted as patients in 29.79, or, in round numbers, in thirty years. The population of the State is not increasing so rapidly as that, and consequently, so far as these figures are to be relied upon, the proportion

of the insane committed to hospitals, as compared to the number of inhabitants of the State, is on the increase.

At Worcester there was a regularly progressive increase in the numbers admitted. At Danvers and Taunton, where fluctuations in this respect were the greatest, the admissions were largely governed by outside influences, not natural but arbitrary. The patients from Boston were sent sometimes chiefly to one of them, sometimes to the other, as circumstances determined.

2. Admissions and Recoveries of Persons in Three Years.

HOSPITALS.		Persons Ad- mitted.	Persons dis- charged Re- covered.	Per cent. of Recoveries on Admissions.	
Worcester,			763	148	19.40-
Taunton,		. '	688	148	21.51+
Northampton,	•		854	76	21.47
Total of three hospitals,			1,805	372	20,61—
Danvers,		•	1,566	878	24.15—
Whole number, .		•	3,371	750	22.25—

The hospital at Danvers has so recently been opened that it is exceptional, in some respects, as compared with the other three. I have consequently so arranged the table that those three can be considered separately.

The proclamation,—"The best authorities assert that 75 to 90 per cent. of recent cases of insanity are curable," with which, or with something equivalent, each half-fledged tyro in mental diseases formerly soared into the regions of imaginative psychology, either in his annual report, as a recently installed superintendent, or in some article upon the subject, as a pamphleteer or a writer for the periodicals, is familiar to those who have read these discussions, even though they may not have met it in its original places. Like the "voice of the turtle," in Palestine, in the springtime of seasons long gone by, that proclamation was, until within the last three or four years, often "heard in our land;" but now, like the song of Childe Harold, it "hath ceased," or, at best, "has died into an echo," like his theme. Yet to him whose faith was challenged by its

reiterated assertion, and whose hope was stimulated thereby into an expectation that all cases might soon be treated in their early stages, the table here presented cannot fail to be sadly and sorrowfully interesting.

It matters little what is asserted can be done so long as it is not done. To the philanthropist, the humanitarian, the political economist, the tax-payer, even the mere citizen, the important question is, not what is the proportion of the insane that has been alleged, on very flimsy grounds, to be susceptible of recovery, under certain given but often impossible circumstances, but what proportion do recover and return to their homes as useful members of society?

By the table just introduced, it is shown that in the course of the three official years ending with Sept. 30, 1882, three thousand three hundred and seventy-one (3,371) persons were admitted into the four State hospitals, and seven hundred and fifty (750) persons were discharged from them as recovered. The recoveries were 22.25 per cent. of the admissions. Hence, not one-half, not even one-quarter, but only a fraction more than one-fifth as many persons recovered as were admitted. In the oldest three of the hospitals, the most recently erected of which has been in operation twenty-four years, the proportion of recoveries was still smaller, being 20.61 per cent., or almost precisely one-fifth, as compared with the persons admitted.

It is not a little interesting to observe the very near approach to equality of these proportions in the oldest three of the hospitals.

At Danvers, the ratio of recovery was larger. This is sufficiently explained by the fact that at the beginning of the period of three years, that hospital had been in operation less than eighteen months. It was not full, and it was the resort for nearly all of the recent cases of insanity from Boston and the four other cities in its vicinity.

For the purpose of further illustration, I here introduce a table showing the ratio of persons recovered to persons admitted at each institution, in each of the three years respectively.

З.	Percentage	of	Persons	Recovered	in	each	Year.

HOSPITAL.	1879-80.	1890-81.	1881-82.	For Three Years.	
Worcester,	18.46	21.94	18.09	19.40—	
	26.62	21.34	17.72	21.51+	
	24.34	16.66	23.83	21.47—	
At the three hospitals,	22.65	20.67	18.94	20.61-	
	28.89	25.41	17.55	24.15-	
At the four hospitals, .	25.95	22.75	18.34	22.25—	

Perhaps the most noteworthy information derived from this table is, that at the hospitals as a whole, there was a progressive diminution of the annual proportion of recoveries from the beginning to the end of the period, as shown by the figures 25.95, 22.75, and 18.34. This regular but quite sufficiently rapid falling off in the proportion of persons recovered may be merely incidental and temporary, but nevertheless it is not encouraging. This graded reduction of recoveries took place at the oldest three hospitals, but to a less extent. In the hospitals, as a whole, it was equal to 7.61 per cent. of the persons admitted; in the three oldest hospitals it was only 3.71 per cent., or a fraction less than one-half as much. The greatest diminution, equal to 11.34 per cent. of the persons admitted, was at the Danvers Hospital. The cause of this is readily understood. As the institution became filled to crowding, the current of recent cases which had been flowing to it was, to a certain extent, diverted from its course, and directed toward the other hospitals.

The largest percentage of annual recoveries at any of the oldest three hospitals, in the course of the period, was 26.62, at Taunton, in 1879-80; and the smallest, 16.66, at Northampton, in 1880-81.

It is a delicate matter thus to bring the several institutions into the closest juxtaposition, for the purpose of a comparison of the results of their work. Were it not that I have great confidence in all and each of them it would not be attempted. I regard these four Massachusetts hospitals as among the best of their kind, not in the United States alone, but in the

world; and I most conscientiously believe that they are now under a medical management so good, and so nearly equal, that any insane person who would recover at any one of them would likewise recover at either of the other three.

We now approach a part of the statistics before us, perhaps the most important as well as the most interesting of all, in consequence of their bearing upon the question of the absolute curability of mental disorders. liability to relapse of a large proportion of the cases recovered from insanity is now very generally known. In some instances the relapse and the recovery occur so frequently that some physicians maintain that there is no recovery, but that the disease, during the apparently rational intervals of the patient, is merely in a state of suspense. But, in these cases, it is the almost universal practice at the hospitals, if they are discharged at the subsidence of each returning paroxysm, to discharge them as recovered. As heretofore shown, the recoveries are thus sometimes largely increased beyond the number of persons. In view of these cases, I have often been reminded of the notorious old toper who one day greatly surprised an acquaintance by telling him that he had "left off drinking," and when the assertion was doubted, reaffirmed its truth, declaring, as undeniable proof of the fact, that he had "left off three times" that morning.

The subjoined table shows the number of persons discharged recovered, and the number of persons readmitted, who had at some former time been discharged as recovered.

4. — Readmissions of Persons formerly Discharged Recovered.

HOSPITALS.	Persons Discharged Recovered.	Readmissions of Persons formerly Discharged Re- covered.	Proportion of Re- admitted to Dis- charged.		
Worcester,	148 148 76	65 70 43	1 in 2.28 1 in 2.11 1 in 1.76		
Totals of the three hospitals,	**************************************	178 66	1 in 2.09 1 in 5.72		
Totals of the four hostals,	750	244	1 in 3.07		

In the return to their homes of seven hundred and fifty (750) persons recovered from their insanity, the hospitals accomplished a great good. This work of beneficence was, however, as is shown by the table, in one sense partially counterbalanced by the readmission of two hundred and forty-four (244) persons who had previously been discharged The percentage of the readmissions on the In other words, very nearly one-third discharges is 32.53. as many formerly recovered persons were taken back from the community, as were given to it by the hospitals. the three oldest hospitals the proportion was still larger, the number of formerly recovered persons readmitted being very nearly one-half as great as that of recovered persons discharged. At the Worcester Hospital it was a fraction more than two-fifths; at the Taunton Hospital, nearly onehalf; and at the Northampton Hospital, more than one-half, or nearly three-fifths.

At the Danvers Hospital three hundred and seventy-eight (378) persons were discharged as recovered, and only sixtysix (66) formerly recovered persons readmitted. portion of the returned recovered to the discharged recovered was as 1 to 5.72, or a little more than one-sixth. This, like the heretofore mentioned exceptional results at that institution, is a consequence of its newness. As before mentioned, at the beginning of the three years it had been in operation less than a year and a half, and hence there had not been time for a relapse of any of its recoveries other than in those persons whose disease recurs at short intervals. As will be seen by the table next to be introduced, the numbers of the readmitted recovered, in each of the three successive years, was 18,17, and 31, respectively, nearly one-half of them being in the last year of the period. As the hospital grows older, this, as well as the other results in its medical history, will approximate more and more nearly those of the three other and more early established institutions.

Before leaving this special topic, it should be remarked that although the Danvers Hospital readmitted but comparatively few of the persons whom it had discharged as recovered, yet it is highly probable that it admitted a no inconsiderable number who had previously been discharged as recovered from the other three institutions. The early reports give no direct information upon the subject, but within four and a half months from the day the hospital was opened, no less than forty-three (43) patients suffering from a second attack were received. It is probable that the larger part of these had recovered from the first attack at other institutions. The same may be said of the seventy-three (73) patients with second attack admitted in the official year 1878-79, which began at the close of that period of four and a half months. Of these one hundred and sixteen (116) patients, who knows how many had recovered once each, at either Worcester, or Taunton, or Northampton? The number can be ascertained only by an examination of records.

In the first two years of the three years' period to which these statistics refer, the Danvers Hospital admitted one hundred and one (101) patients who had been inmates of the other three hospitals mentioned, but we are not informed of the condition, in regard to recovery, in which they had been discharged from those hospitals.

5.—Annual Readmissions of Persons formerly Discharged Recovered.

HOSPITALS.	1879-80.	1890-81.	1881-82.	Totals.	
Worcester,	25	17	23	65	
	19	29	22	70	
	22	10	11	43	
Total of three hospitals, . Danvers,	66	56	56	178	
	18	17	31	66	
Totals of the four hospitals,	84	73	87	244	

Some of the most important information imparted by this table has already been mentioned. By an examination of the figures in detail it would appear that the number of formerly recovered persons annually readmitted is accidental, or incidental. It follows no law. There is neither a regularly progressive increase nor a regularly progressive decrease.

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The whole number admitted in the first year is smaller by two than that of the last year; but at the oldest three hospitals the number in the first year exceeded by ten that of either of the other years.

So much in regard to the persons who had previously been discharged recovered, but who had returned to the hospitals. It will now be shown that some of those persons had been discharged recovered more than once. This will be done by giving the number of times that all of them (244) had been so discharged.

6.	Ratio of	Recoveries	to	Persons	Recovered.
----	----------	------------	----	---------	------------

HOSPITALS.	Readmissions of Persons formerly dis- charged Re- covered.	Number of times they had been discharg- ed Recovered.	Excess of Re- coveries over Persons.	Average Re- coveries to each l'erson.	
Worcester,	65	160	95	2.46	
	70	122	52	1.74	
	43	66	23	1.53	
At the three hospitals,	178	848	170	1.95	
	66	67	1	1.01	
At the four hospitals, .	244	415	171	1.70	

Hence it will be perceived that the two hundred and forty-four (244) recovered persons readmitted had been discharged recovered four hundred and fifteen (415) times. The excess of recoveries over persons is one hundred and seventy-one (171). At the oldest three hospitals the proportionate excess is much larger. Their one hundred and seventy-eight (178) formerly recovered persons readmitted had been discharged recovered three hundred and fortyeight (348) times. The excess of recoveries over persons is one hundred and seventy (170). The number of recoveries lacks but eight (8) of being twice as great as that of persons. At the Worcester Hospital, much the oldest of the four establishments, sixty-five (65) recovered persons readmitted had been discharged recovered one hundred and sixty The excess of recoveries over persons was (160) times. ninety-five (95); and the number of recoveries nearly twice and a half as great as that of persons. At the Danvers Hospital the number of recoveries exceeds that of persons by only one (1). For reasons already given this result will be understood.

There is one supposable source of error in these statistics of repeated recoveries, and that is the possibility that a person who had been discharged recovered more than once, may have so been discharged in more than one of the three official years. If, for example, a person who had previously recovered three times were discharged recovered in the first year, making his fourth recovery, and being afterwards again admitted and discharged recovered in either of the other two years, he would be reported twice in the period, once as having had three former recoveries, and again as having had four. This would make the number of his recoveries, as represented in the table, seven, whereas it had been but four. If the table contains such errors, they probably do not increase the totals of repeated recoveries to a greater extent than they are diminished by the admission of persons at Danvers who had previously recovered at the other three hospitals.

This rather minute and detailed analysis of the statistics of recoveries at the Massachusetts State hospitals, is, from my point of view, more than justified by the circumstances under which it is made. The truth of the seven conclusions which were legitimate deductions from the data which, in 1876, I was able to glean from the results of observations and experience under an imperfect method of recording such statistics at the hospitals, was widely doubted. This doubt was no especial cause for wonder, since, in some instances, those deductions differ very greatly from what, even in the minds of well-informed persons, had thitherto been regarded as the truth. To a very considerable extent the doubt has been removed by the articles upon the subject which have appeared in the reports of this hospital since the date just mentioned, but it may still exist in some places.

In Massachusetts a method of record and tabulation expressly designed for the purpose of bringing out from the practical experience of its hospitals the data which would prove or disprove the truth of those conclusions, has been in operation for some years. It was clearly proper that I

should avail myself of the fruits of this crucial test, as I here have done. What are the results? The answers can best be made to appear by the reproduction in brief of several of the conclusions.

Conclusion 1. — The reported recoveries are increased to an important extent by repeated recoveries of the same persons.

This is proved by Table 6, where it is shown that at the three oldest hospitals one hundred and seventy-eight (178) persons were discharged recovered three hundred and forty-eight (348) times.

Conclusion 2.— The recoveries of persons are much less numerous than the recoveries of patients or cases.

This conclusion is, as a proposition, the converse of the first. Hence, it is proved by the converse of the same statistics. At the three oldest hospitals the number of recoveries of persons was one hundred and seventy-eight (178); but the number of recoveries of patients or cases was three hundred and forty-eight (348), or very nearly twice as great as that of persons.

Conclusion 3.— From the number of reported recoveries of cases, or patients, it is generally impossible to ascertain the number of persons who recovered.

This may also be proved by the same (6) table. Under the old method of reporting in this State, as well as elsewhere, the three hundred and forty-eight (348) recoveries at the three hospitals would have been published, without giving any clew to the number of persons in whom those recoveries took place. By the new method that number is given, and it is found, in this instance, to be one hundred and seventy-eight (178).

Conclusions 4 and 5 are by their very nature, not susceptible of proof or disproof by these statistics.

Conclusion 6.—The (formerly) assumed curability of insanity has been practically disproved by more extensive experience.

By cumulative evidence in Table 2, that disproof is corroborated and strongly fortified. At the four hospitals, 3,371

persons were admitted, and only 750, or a trifle over one-fifth of them, were discharged recovered. This proportion — 22.25 per cent. — is much lower than was even dreamed of in 1876; and he who would then have ventured to assert that such could be the truth, would have been considered as either a Munchausen, an ignoramus, or a proper candidate for an asylum for imbeciles.

It will be perceived that this reduction of the ratio of recoveries is in part due to the rejection of the duplicate and multiple recoveries of the same person, thus giving to each person but one recovery. For all other than strictly technical or medical purposes, this, as has heretofore been stated, is the information wanted.

Conclusion 7.— The proportion of recoveries at the hospitals has been constantly diminishing, during a period of from twenty to fifty years.

These statistics cannot prove anything anterior to 1876, when that conclusion was written. But by Table 3 it is demonstrated that, in the four Massachusetts hospitals, the diminution, since 1879, has continued, the progressive reduction being represented by the consecutive annual percentages — 25.95, 22.75, and 18.34. The proportion of recoveries in the year just elapsed is a little less than three-fourths as large as it was three years ago, in the official year 1879-80.

Very clearly, if insanity is to be diminished, it must be by prevention and not by cure.

One more Illustration. — With the foregoing exposition I might, perhaps, very appropriately close forever these published studies of the subject of the curability of insanity. If the arguments which have been used, and the illustrative proofs which have been adduced, in the course of a seven years' discussion, have been insufficient to procure conviction of the truth of the conclusions published in 1876, it is not probable that anything will have the power to convince. It was once intimated that there were minds which would not "be persuaded though one rose from the dead." Others like them there may be at the present time.

There is, however, one hitherto unused illustration furnished by the history of one of the American hospitals, that

I cannot well forbear to present in the present connection. It corroborates the testimony of the experience at the Massachusetts hospitals during the last three years, and emphasizes the force of it.

The epidemic fever of opinion in favor of "good"thereby meaning, as practically translated, - "expensive" hospitals, which raged throughout the decennium from 1865 to 1875, or thereabouts, will be but too well remembered. It left, for Massachusetts, its own elephantine monument upon Hathorne Hill, in such fashion that it is not likely soon to be forgotten by the people of the Commonwealth, and, at the same time, similarly perpetuated its memory in other States. Of all the excessively costly curative institutions which were the products or outgrowths of that temporary craze, the Hudson River Hospital, at Poughkeepsie, New York, is, if I mistake not, the most remarkable for its cost-Danvers is but a pigmy as compared with it. was intended to be the institution of all institutions, destined, so long as it might exist, to stand as a practical and therefore irrefutable proof that lavish expenditure upon hospital buildings can cure insanity.

That hospital was opened on the 20th of October, 1871, and its last published report covers the official year ending with the 30th of September, 1881. At the latter date, it had been in operation ten years, minus twenty days. In the course of that decennium it admitted sixteen hundred and seventy-one (1,671) patients, and discharged as recovered three hundred and fifty-three (353). The percentage of recoveries, as compared with the admissions, is 21.12, or a fraction more than one-fifth.

In view of this result at the Hudson River Hospital, one of the most prominent men engaged in the work connected with the charities of the State of New York, writes to me as follows:—"If any additional evidence of the correctness of your conclusions in regard to the curability of insanity is needed, it is furnished in the ten years' experience of this most expensive of institutions 'established presumably for cure."

The very near approach to identity in the results at Poughkeepsie and at the Massachusetts hospitals, may arrest

the attention of the reader. The proportion of recoveries was. —

But there is a difference in the computation of these ratios which operates pretty largely in favor of the Massachusetts institutions. The statistics of Massachusetts relate only to persons; those of Poughkeepsie to patients, or cases. The Hudson River Hospital gets the advantage of all the repeated recoveries of the same person, which, like all other institutions of the kind, it must have had; whereas at the Massachusetts hospitals, these were all rejected.

A Moment abroad. — Had it not been for the analysis of the Massachusetts statistics, several other appropriate topics furnished by both the United States and Europe, would have been noticed. As it is, I must pass them by, with but two exceptions upon the other side of the Atlantic.

In my annual report, one year ago, there was a notice of the statistics of the Morningside Asylum, at Edinburgh, Scotland. It appears that, from a misunderstanding in regard to the patients who had suffered more than one attack, I was led to erroneous conclusions. It was stated that of the 347 patients admitted, 108 were readmitted after recovery from one or more former attacks. This was a mistake, of which the acknowledgment and the correction give me more pleasure than the assertion. The 108 should have been 63. But I will let Dr. Clouston make the full correction in his own language.

"The asylum discharged [in 1880] 165, but it had taken back, altogether, of persons who had been discharged, recovered and unrecovered, 80. Of this 80, 63 had recovered in former years, showing that there is a considerable part of the inmates of asylums whose brain condition being unstable, they come in and go out frequently. But out of the 267 first admissions there were 97 first recoveries."

My most cordial thanks are due to the doctor. He acknowledges, in the language which I have italicized, that

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his own statistics show precisely what I have been attempting to prove for the last half-dozen years.

I am now indebted to the doctor for his very interesting report for the year 1881. In this the recoveries for the year are reported in a manner differing from that of the next preceding year, and by that difference the report becomes more lucid. The number of admissions in the course of the year was 339, of which 247 were for the first time, while 92 were readmissions. I here copy, in full, the table of recoveries.

Persons Recovered in 1881.

	Males.	Females.	Total.
A. Recovered for the first time,	45	48	93
recovered,	-	4	4
charged recovered,	6	3	9
previous years, (a) Readmitted, and again discharged	31	84	65
recovered		-	-
charged recovered	7	4	11
Number of persons recovered,	76	82	158
Number of cases of recovery,	76	86	162

The whole number of *persons* who recovered within the year was 158: 93 of these recovered for the first time. But after their discharge as recovered, four of them were readmitted and again discharged recovered. They made two recoveries each within the year. Nine more of them were readmitted, and, at the end of the year, still remained in the asylum. Although discharged recovered, and counted among the recoveries, they came back within the year.

The remaining 65 of the *persons* who were discharged as recovered, did *not* recover for the first time; but each one of them had recovered once or more in previous years. Of these 65 who were discharged recovered within the year, 11 came back, and were still in the asylum at the expiration of the year.

Summing the two classes, it appears that of the 158 persons discharged recovered within the year, 24 relapsed and were readmitted within the year. Four of them were discharged recovered a second time within the year, and 20 (9 + 11) were still in the asylum at the close of the year.

I have thus put the information in the table into the language of words for the benefit of those who have no taste for the language of numerals. It is a lucid showing, so far as it goes, but it would have been more satisfactory if we had been told how many recoveries the 65 persons had made in previous years. The movement of the population of the asylum is quick, and the making of repeated or multiple recoveries is evidently more rapid than in any one of the Massachusetts hospitals,

British Medico-Psychological Association. — It was mentioned last year that a series of improved and reformatory tables, by which the defects in the method of reporting the statistics of the institutions for the insane would be remedied, had been prepared by a committee and presented for adoption by the British Medico-Psychological Association. After due discussion, it was decided to postpone action upon the subject for one year. At the meeting of the Association in August of the current year, there was another discussion, which ended, at length, in the adoption for one year, of the new tables, So far so good—and very good. A prudent caution in driving, even when one knows that he is on the right road, is commendable.

The superintendents of the British asylums will find that the new tables will increase their labor to a no inconsiderable extent; a fact of which no one perhaps is more conscious than they themselves. The work of preparing the statistics of this hospital was increased, probably threefold, by the tables introduced three years ago. But the British superintendents have always put very much more work into their statistics than have the superintendents of the institutions in this country; and hence their labor will not be proportionally increased. But, for them and for us, it is the end that crowns the work, and all upon whom the burden is imposed must look for their reward in the greater revelation of truth, and the immensely enhanced value of their statistics.

ACKNOWLEDGMENTS.

To those who, in their own homes, have been thoughtful of our inmates, and so far interested in their welfare as to assist in ministering to their entertainment or instruction, we desire, both for ourselves and in behalf of the recipients, to extend our cordial thanks. The printed contributions in this direction which have been received, are as follows:—

Six volumes of Harper's Family Library, a large number of newspapers, and a Christmas box containing many presents for persons in the women's department, from Miss Florence Austin; a considerable collection of copies of several magazines, from Mrs. J. H. Butler; a package of religious newspapers from S. E. Bridgman, Esq.; a quantity of newspapers and other periodicals from Dr. Crittenden; one copy, weekly of "The Christian Register," from its publishers; and two copies, weekly, of the "Staaten Zeitung," from its publishers.

The contributions by personal presence and performance consisted of a lecture on Astronomy, by George W. Horr, Esq.; several exhibitions of stereoptic pictures, by Dr. T. W. Meckins; a "reading" and a concert of vocal music, each by several members of the Junior Class in Smith College; three vocal and instrumental concerts by Miss Longley and Miss Rice, with readings at one of them by Miss Stevens, and at the other by Mr. Williams; and a concert by the members of the choir of the Edwards Church.

OFFICIAL CHANGES.

The three physicians who, at the beginning of the official year, constituted the medical staff of the institution, still remain in office. By the action of your board, at its meeting in July last, the number of the staff was increased to four, by the appointment to the place of Second Assistant Physician, of David G. Hall, M. D., who has satisfactorily performed his duties to the present time. Dr. Nims, at the same time, was appointed Assistant Superintendent; and Dr. Pickard First Assistant Physician.

By the failing health, and the resignation in January last, of Mr. Asa Wright, the farmer, the hospital was deprived of the services of a valuable officer, and the Superintendent

of an active, energetic and efficient co-laborer. He took the immediate charge of the farm in December, 1857, and, when the institution was organized, received the appointment to the office, which he held continuously until the time of that resignation. The ability with which he conducted its affairs placed him in general reputation in the rank of the ablest farmers of western Massachusetts. More, if not better than this, he was fortunately endowed by nature with the peculiar faculty by which, in his relations with the patients, he was enabled to get along smoothly, and at the same time exercise upon them a favorable influence. It is my pleasure, no less than my duty, to accord to Mr. Wright his share of merit, as one of the agencies by and through which the hospital has attained its measure of success, and of favorable consideration by the people of the Commonwealth.

Thus far, since the beginning of the current calendar year, the place of farmer has been filled by John Mercier, who for fourteen years had been employed upon the premises. He has performed the duties of the position to my satisfaction, and much better, in my opinion, than would have been possible by any man without experience here.

As the drops of rain to the sea, so fall the years into the great ocean of the past. At this point, where one has gone and another cometh, I once more gladly recognize and acknowledge the aid, the sympathy, and the generous consideration of your board, as well as the cordial co-operation of all who are engaged with me in the prosecution of the administrative affairs of the hospital.

PLINY EARLE.

NORTHAMPTON, Oct. 5, 1882.

APPENDIX.

2.* Monthly Admissions, Discharges, and Averages.

•	An	M188I 0	NS.		dingi)	eaths.)		VERAGE OF	
Montes.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
1861.						<u> </u>			
October,	6	6	12	8	5	13	227.35	235.65	463.00
November,	7	8	15	6	3	9	226.97	238.16	465.13
December,	8	5	8	3	10	13	228.42	236.42	464.84
1882.		İ	1					ļ	1
January,	5	5	10	2	6	8	229.71	234.03	463.74
February,	8	3	6	3	13	16	229.61	229.71	459.32
March,	5	6	11	4	4	8	230.39	225.54	455.93
April,	2	5	7	2	4	6	232.93	225.27	458.20
May,	10	6	16	6	3	9	234.13	229.51	463.64
June,	5	9	7	8	7	15	234.43	229.00	463.43
July,	6		15	6	3	9	234.19	226.06	460.25
August,	4	5	9	8	3	11	229.71	232.42	462.13
September,	6	2	8	6	5	11	228.40	281.78	460.13
Total of cases, .	62	62	124	62	66	128			
Total of persons,	61	58	119	62	65	127		i	
Daily average for							200 52	004.4	
he year,	-	-	-	-	-	-	230.52	231.14	461.661

3. Received on First and Subsequent Admissions.

NUMB	ER O	r TH	E ADM	118810	N.	CAI	ses Admit	TED.		es Previo Recoverei	
						Males.	Females.	Total.	Males.	Females.	Total.
First,						50	52	102	_	_	_
Second,				•		8	5	13	4	1 1	5
Third,						_	1 1	1	_	2	2
Fourth,						1	1 1	3	_	-	_
Fifth,						1	2	3	2	4	6
Sixth,				•		1	-	1	5	_	5
Ninth,						l ĩ	_	ī	4	_	4
Thirteen	nth,					_	1	1	_	9	4
Total Total	of d	ases	, .	•		62 61	62 58	124 119	15	. 16	31 11

^{*} For Table No. 1, see the beginning of the Superintendent's report.

[†] These totals were obtained by a division of the sums of daily residence for the year by 365, the number of days in the year.

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4. Ages of Persons admitted for the First Time.

AGES.		AT F	irst Atta In sa bity.	CK OF	Wa	ин Арилт	TED.
ACID.		Males.	Females.	Total.	Males.	Females.	Total
Fifteen years and less,		_	8	3	_	1	1
From 15 to 20 years, .		2	3 3 8	3 5	2 7	3 7	5
20 to 25 years, .		6 9	8	14	7	7	14
25 to 30 years, .		9	10	19	7	10	17
30 to 35 years, .		1		6	6	6	12
35 to 40 years, .		4	5 4 9	8	7	4 9	11
40 to 50 years, .		10	9	19	13	9	22
50 to 60 years, .		2		4	_	4	4
60 to 70 years, .		4	8	4 7 5	6	4	10
70 to 80 years, .		4 2	2 3 3	5	li	4	5
Over 80 years,		-	_	_ i	Ī	_	i
Unknown,	•	10	2	12	_	-	_
Total of persons, .		50	52	102	50	52	102

5. Parentage of Persons admitted.

PLACES OF N	A T T	VITY.		Ма	LES.	FEM	ales.	To	TAL.
12000 01 1.				Father.	Mother.	Father.	Mother.	Father.	Mother
Maine, . New Hampshire	•	•		1	1 1	<u>-</u>	- 8	1 2	1 4
Vermont, .		·	•		2	l î	-	l ī	4 2 26
Massachusetts,				14	17	10	9	24	26
Rhode Island,				1	-	- '	-	1	-
Connecticut,				9	6	8	4	12	10
New York, .				3	5	3 1	-	4	5
New Jersey,				-	-	_	1	-	1
Virginia, .				2	1	-	-	2 ·	1
Kentucky, .		•		-	1 8	-	-	_	1
Canada, .				4		3.	4 8	8	7
England, .				1	1	3.	8	4	4
Ireland, .		•		22	22	28	27	50	49
Scotland, .				1	-	2	2	8	2
France, .				-	-	3	1	3 1 4	1
Germany, .		•		1	1	3	8	4	4
Poland, .				1	- 1	-	-	1	-
Italy,	•	•	•	-	-	1	1	1 1	1
Total of person	18 ,			61	61	58	58	119	119

6. Residence of Persons admitted.

PLACES.					Males.	Females.	Total.
Massachusetts,—							
Hampshire County, .					.11	10	21
Hampden County, .		•			27	26	53
Berkshire County, .			•		15	12	27
Frankl n County, .	•	•			. 8	10	18
Total of persons,					61	- 58	119
Cities or large towns,*				.	81	27	58
Country districts, .	•				.30	81	61
Total of persons,					.61	58	119

^{*} Containing not less than 10,000 inhabitants.

7. Civil Condition of Persons admitted.

	~=		-				1	marı	ied.	м	ARRI	ED.	w	IDOW	ED.	Di	VORC	ED.
NUMBER	OF	TE	LE .	AD	MIS	810N.	1	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First,						•	24	22	46	23	18	41	2	12	14	1	-	1
Second,							5	2	7	2	-	2	-		-	-	-	-
Third,			•				-	_	-	-	_	-	_	1	1	-	-	-
Fifth,						•	-	1	1	1	1	2	-	-	_	-	-	-
Sixth,							1	-	1	-	-	-	-		-	-	-	_
Ninth,							1	_	1	-	-	-	-	-	-	-	-	_
Thirteen	th,						-	1	1	_	-	-	-		-	_	_	_
Tota	ıl o	f p	er	807	ıs,*		32	25	57	26	19	<u>45</u>	2	13	15	1	_	1

[•] One man nnknown.

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8. Occupations of Persons admitted.

OCCUPATI	ons.			Males.	Occupations.	Female
Journalist, .				1	Teacher,	1
Clerk,				1.	Student,	1
Book-keeper,		•		3.	Musician's wife,	1
Merchant, .				1	Hotel-keeper's wife,	1
Manufacturer,				1	Farmer's wife,	1
Commercial trav	velle	r,		1.	Farmer's daughter,	1
Dealer in rags,				1.	Laborer's wife,	4
Druggist, .				1	Mill operative,	12
Farmer, .			·.	8	Mill operative's wife, .	2
Laborer, .				15	Machinist's wife,	1
Mill operative,				6	Whip-maker's wife,	1
Paper-maker,				2	Basket-maker's wife, · .	1
Machinist, .				1	Shoemaker's wife,	1
Mechanic, .				2	Kalsominer's wife, · .	1
Watch-maker,			•	1	Cigar-maker's wife,	1
Carpenter, .				4	Butcher's wife,	1
Painter, .				1	Collier's wife,	1
Wagon-maker,				1	House-keeper,	11
Blacksmith,				1	Servant,	9
Tinner, .				1	Laundress,	2
Moulder, .				1	None,	4
Butcher, .				1		
Mason,				1		
Cook,				1		
None,				4		
Total of perso				61	Total of persons,	58

9. Reported Duration of Insanity before Last Admission.

PREVIOUS DURATION			ADMI B Hos			L OTH			TOTAL	
	-	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital,		_	_	_	_	_	_	_	_	_
Under 1 month,		8	14	22	_	_		8	14	22
From 1 to 3 months,		9	9	18	- '	_	- 1	9	9	18
3 to 6 months,		1	9	10	-	'	- :	1	9	10
6 to 12 months,		5	2	7	-	2	2 1	5	4	9
1 to 2 years, .		11	7	18	_	1		11	8	19
2 to 5 years,		9	4	13	5	_	5	14	4	18
5 to 10 years, .		2	4	6	i –	-	-	. 2	4	6
10 to 20 years, .		2	2	4	2	5	7	4	7	11
Over 20 years,		-	-	-	4	2	6	4	2	6
Unknown,	•	3	1	4	1	-	1	4	1	5
Total of cases, .		50	52	102	12	10	22	62	62	124
Total of persons, .		-	–	-	11	6	17	61	58	119
Average of known cas	es, .	Yrs. 128	Yrs. 1 5 12	Yrs. 11/2	Yrs. 14 1 1	Yrs. 10 7	Yrs. 12 4	Yrs. 4 9 58	Yrs. 258 261	Yrs 3,6,

[•] In this division of the table the whole period of time, from the first attack to the last admission, is indicated.

10. Form of Disease in the Cases admitted.

. FORM	(0)	F DIS	EASE.			Males.	Females.	Total
Mania, .						37	40	77
Mahia, paretic,					.	1	-	1
Mania, epileptic, Typhomania,					.	2	2	4
Typhomania.						1	_	1
Melancholia,						10	15	25
Dementi a , .					!	9	4	13
Dementia, senile,						1	-	1
Dementia, epilepti	c,			•		1	1	2
Total of cases,						62	62	124
Total of persons					.	61	58	119

66 LUNATIC HOSPITAL AT NORTHAMPTON. [Oct.

11. Probable Causes of Insanity in Persons admitted.

	CAUS	ES.					Males.	Females.	Total
j	Phys	ica	l.						
Ill-health,	•						4	13	17
Intemperance, .							13	2	15
Overwork,							4	. 7	11
Epilepsy, Masturbation, .							8	3	6
Masturbation, .							6	_	6
Puerperal,							· _	5	5
())d ago							1	2	3
niury of head.			:				2	-	2
	ain,						1	-	1
Opium eating, . Injury,	•						1	_	1
Injury,							1	_	1
Sunstroke,							1	-	1
Amenorrhœa, .							_	1	1
							-	1	1
Total of physical	١,			٠.			37	34	71
	Ment				•			1	
Pecuniary difficulti	6 8.						· 4	_	4
Domestic trouble,	•						2	1	3
'Trouble,"							_	3	3
Religious exciteme	nt.						1	2	3
Disappointment, .	,						_	1 1	1
Disappointment in	love						1	1 - :	1
Loss of husband, .	•			-			-	1 1	1
Hard study,							1] _	1
Fright,		•					ī		i
Total of mental,							10	8	18
Total of physica			•	:	•	•	37	34	71
Unknown	٠,		•				14	16	30
Total of persons,							61	58	119

12. Relation to Hospitals of the Persons admitted.

	Males.	Females.	Total.
Never before in any hospital,	46	49	95
Former inmates of this hospital, Former inmates of other hospitals in this State:—	11	6	17
Worcester,	-	1	1
Worcester,	1		1
Former inmates of hospitals in other States, Former inmates of this hospital and of hos-	1	1 1	2
pitals in other States,	2	1	3
in other States,		-	
Total of persons,	61	58	119

13. Discharges, classified by Admission and Result.

		RECOVERED.	ED.	Muce	MUCH IMPROVED.	KD.	#	Іменочяр.		Ç	UNIMPROVED.	Ġ		DIED.			TOTAL.	
ADMISSION.	Males.	Females.	Total.	Males.	Fensales.	Total.	Males.	Females.	Total.	Males.	Females.	_latoT	Males.	Females.	• LatoT	Males.	Females.	Total.
First,	. 13	===	27	₹.	2	11	4	14	18	12	11	.23	17	11	28	20	22	107
Second,	-	. I	-	. I	কা	81	- -	1	-	-	1	-	9	87	x 0	æ	4	12
Third,	ا 		1	1	1	1	1	,	1	1	-	н	-	1	1	-	_	81
Fourth,	· I	1		1	ı	ı	-	ı	-	_	_	61	1	ı	1	67	-	ဇာ
Seventh, .	+ 	1		ı	1	ı	ı	ı	ı	1	,	ı	ı	-	-	1	-	-
Ninth,	1		I	1	1	1	-	ı	-	ı	ı	ı	ı	ı	ı	_	ı	-
Thirteenth,	1 			1	1	ı	1	1	1	ı	ı	ı	1	1	ı	ı	-	-
Total of cases, .	51 81	15	58	4	6	13	2	14	21	14	13	27	24	#1	88	63	65	127
Total of persons,	· ·	ı	ı	1	1	1	•	ı	1	1	ı	1	1	1	1	63	† 9	126

One woman was discharged as not insane, making the total cases 128, and the total of persons 127.

14. How supported.

SUPPORTED AS	Pati	вите Армі	TTED.	AVER	AGE OF TH	E YEAR.
SULIVELLIA	Males.	Females.	Total.	Females.	Males.	Total.
State patients,	. 21	19	40	88.71	78.13	166.84
Town patients,	. : 31	34	65	112.78	125.46	238.25
Private patients, .	. 10	9	19	28.98	27.53	56.52
Total of cases, .	62	62	124	_	-	461.61*

^{*} This, the weekly average, is smaller by the fraction of $\frac{1}{20}$ than the daily average, which is 461.66.

15. Cases discharged Recovered.—Duration.

PERIOD.		rion b omissic	EFORE		ITAL I	i	WHOL FROM		
I ERROD.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Under 1 month,	4	7	11	1	-	1	_	-	-
From 1 to 3 months, .	2	3	5	4	6	10	2	5	7
3 to 6 months,	_	4	4	5	5	10	2	2	4
6 to 12 months, .	2	-	2	3	3	6	3	7	10
1 to 2 years,	3	-	i 3 i	_	-	-	4	-	4
2 to 5 years,	1	-	1	-	1	1	1	-	1
5 to 10 years,	-	-	-	-	-	-	-	-	-
10 to 20 years,	-	-	¦	-	_	-	- '	-	-
Over 20 years,	-	-	- ;	-	_	-	-	· -	` -
Unknown,	1	1	2	-	<u> </u>	-	1	1	2
Total of cases,	13	15	28	13	15	28	13	15	28
Total of persons, .	13	15	28	13	15	28	13	15	28
Average of known cases (in months),	7 1	115	4 ₂ 1	313	58	423	 10\$ 	7.2	823

16. Cases resulting in Death.—Duration.

PERIOD.		TION B DMISSIC	KFORE		PITAL I		WHOI FROM	E Dui	
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital,	-	_	. -	_	_	_	_	_	_
Under 1 month,	1	1	2	3	1	4	1	1	2
From 1 to 3 months,	-	-	i - i	1	1	2		_	-
3 to 6 months, .	1	1	2	1	-	1	_	1	1
6 to 12 months,	1	-	1 ;	4	3	7	-	-	_
1 to 2 years,	3	5	8	6	3	9	2	1	3,
2 to 5 years,	4	4	8	4	1	5 5	4	2	6
5 to 10 years,	3	_	3 ,	$\frac{3}{2}$	2	5	4	3	6 7
10 to 20 years,	2	-	2	2	3	5	4	3	7
Over 20 years,	1	_	1)	_	-	_	1	_	1
Unknown,	8	3	11	_	i –	-	. 8	3	11
Total,	24	14	38	24	14	38	24	14	38
Average of known cases (in months),	68 J	22 ₃ 8 ₅	4923	4.5 ₅ 5 ₄	60,5	50 1 8	1141	67,1	948

17. Cases discharged by Recovery or Death.

FORM OF IN:	SANI	TY.		1	RECOVERIES	5.	1	DKATHS.	
			_	Males.	Females.	Total.	Males.	Females	Total
Mania,				8	13	21	6	6	12
Mania, paretic,				-	- '	-	1	, -	1
Mania, epileptic,				_	_	_	2	-	2
Typhomania,				-		-	1	-	1
Melancholia,				5	2	7	1	3	4
Dementia.				_	_	_	. 8	4	12
Dementia, senile				_	<u> </u>	-	1	-	1
Dementia, epilep	tic,			_	- '	_	2	. 1	3
Dementia, pareti					-	-	2	-	2
Total, .				13	15	28	24	14	38

18. Causes of Death.

CAUSES.	Males.	Females.	Total.
Nervous System. — Epilepsy,	3	1	4
Paresis,	3 1	-	3
Paralysis,	1	1 1	2
Metastasis of erysipelas,	1	1 1	3 2 2
Typhomania,	1	l – I	1
Exhaustion of acute			
mania,	1	- 1	1
Exhaustion of chronic		1	
mania,	1	- '	1
Mania à potu,	1		1
Circulatory Fatty degeneration of the		1 .	
heart,	1	_	1
Disease of heart,	-	1	1
Anæmia,	1	-	1
Respiratory. — Phthisis,	3	6	9
rneumonia,	1	-	1
Congestion of the lungs, .	1	-	1
Digestive. — Gastritis,	-	1	1
Diarrhœa,	1	-	1
General. — Marasmus,	2	1	3
Old age,	_	1	1
Accidental. — Suicide,	2	-	2
Result of wound,	-	1	1
		<u> </u>	
Totals,	24	14	38

19. Deaths, classified by Results of Previous Admissions.

NUMBER OF THE	Rec	COVE	RED.		Muci		In	PROV	ED.	Uni	MPRO	VED.	7	lota:	L.
ADMISSION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First,	1	_	1	1	_	1	1 2	3	5	3	-	3	7	3	10
Second, .	I -	1	1	l -	_	-	ı –	-	l – I	1	-	1	1	ı	2
Third,	-	1	1	-	-	-	١ –	_	-	-	-	-	-	1	1
Fourth, .	_	-	-	-	-	-	1 -	1	1	i –	-	-	-	1	1
Fifth,	-	-	l –	i -	_	_	- 1	1	l f	-	–	-	' -	1	1
Sixth, .	-	-	-	-	-	-	· -	1	1	-	-	-	-	1	1
Totals, .	1	2	3	1	-	1	2	6	8	4	-	4	8	8	16

20. Recoveries, classified by Results of Previous Admissions.*

NUMBER OF THE			RED.	IM.	Muci Prov	KD.		PROV				VED.	_	l'otai	
ADMISSION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Mn.	Fe.	Tot.	Ma.	Fe.	Tot.
Twelfth, .	_	1	1		_		<u> </u>	_	;	_	-	ii	1	1	
Total, .	-	1	1	-	-	-	! -	-	! - !	-	-	i –	-	1	1

[•] In all the cases of more than one admission, this classification is based upon the result of the admission next preceding the last, in each case respectively.

21. Deaths, classified by Duration of Insanity and of Treatment.

PERIOD.				ION OF IN			KNOWN P	
			Males.	Females.	Total.	Males.	Females	Total.
Congenital,			-	_	_		_	_
Under 1 month, .			1	1	2	2	1	3
From 1 to 3 months,				-	_	1	1	2
3 to 6 months,			' –	1	1	. 1	-	1
6 to 12 months,			l –	_	-	5	3	8
1 to 2 years,			2	1 .	3	3	3	6
2 to 5 years,			4	2 3	6	5	-	5
5 to 10 years,			4	3	7	5	3	8
10 to 20 years.			4	3	7	. 2	3	5
Over 20 years, .			1	2	23	· -	· -	_
Unknown,			i 8	! 1	9		- ;	-
Totals,			21	14	38	24	14	38
Average of known camonths,)	8 es	(in	113	13713	124%	49	67 11	5584

22. Ages of those who Died.

AGES.		AT TI	MR OF THE ATTACK.	FIRST	AT 1	Time of D	EATH.
		Males.	Females.	Total.	Males	Females.	Total
Fifteen years and less,		_	- i	_	· _	<u> </u>	
From 15 to 20 years,		_	-	-	_	_	_
20 to 25 years,		2	-	2	1	_	1
25 to 30 years,		4	3	7	2	! -	2
30 to 35 years,		 1	i - 1	1	4	1	5
35 to 40 years,		1	' 3	4	4	1	5
40 to 50 years,		4	4	8	9	5	7
50 to 60 years,		ī	2	3	2	1 3	5
60 to 70 years,		2	_	2	4	' ĭ	5
70 to 80 years,		ī	1	2	3	1 2	5
Over 80 years, .		_		_	2	ī	3
Unknown,	•	j 8	1	9] -	-	-
Totals,		24	14	38	24	14	38

23. Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1882.

					_	1		1	İ	 	NEW	CASE	S (FIR	BT ADM	NEW CASES (FIRST ADMISSIONS)	¦ :		!	!		!	1
	•				<u> </u> 	į						1	 Віясни			: 2	DISCHARGED AND DIED IN 1881-82.					
	YEARS.					КДУ	Армітткр.	·	RECO	RECOVERED.		MUCH IMPROVED.	PROVEE		IMPROVED.	ė	Cxn	UNIMPROVED.	eg.	1	DIED.	
		1					Females.	.IntoT	Malea.	Females.	Total.	Females.		Males.	. Ретавлея.	Total.	Males.	Females.	.fato'l' —-	Males.	Females.	Total.
1858, 2 months,							129	228		1	,	- '			1		1	_,	1	-	·	1
1858-59, .						75	46	88	ı	1	1		-			1	1	-1	1	1	ı	ı
1859-60,						99	91	157	1	1	-	<u>.</u>				ا 		1		ı	ı	1
1860-61,			•	•		58	97	104	ı					_		1	· -	- 1	_,	1	ı	1
1861–62, .					٠.		43	_ 1 6	,	1				_'	·- <u>-</u>		 '	ı		-	1	_
1862-63,			•	•	• •	99	22	113	1	ı	1	 			-	-		1	<u>-</u>		- I	ı
. 1863–64,					م	35	98	65	,	1	1	- '. I			-		-	- 1	·	ı	, ,	ı
1864–65, ·					٠ <u>٠</u>	24	25	109	1	ı	-			'	1	1	ī	- 1	1	1	1	1
<u> </u>					9	99	52	118	1	ı	1	<u> </u>		- 1	1		1	1	ı	_	1	-
1866–67, .		•				42	69	111	1	1	-	<u> </u>	<u>.</u>		1	_'		1	٠,	1	-	_
						54	71	125	ı	1	-	<u>'</u>	<u>'</u>	-	1	t			1	ı	1	ı
		٠.				12	64	136	_	<u> </u>	-		<u>.</u>	٠		I .	1	1	-	1	- I	ı
2																						

1869-70, .	•	•	•			•	98	103	183	ı	1	1	1	-	_	_		<u>.</u>			<u> </u>	_	1	
1870-71,	٠	•	•	٠	•	•	93	88	181	ı	,	ı		. 1				- -	-	-	<u>'</u>	·	!	
1871-72, .	•	•	٠	٠.			83	35	168	ı	ı	1	1	1	1	1		' 	' 	 -	' 	۱ 	1	
1872-73, .	•	٠	٠	•	•		89	69	158	ı	ı	1	-,	1		1		<u> </u>	_ <u>'</u> 	- 	<u>.</u>	_		
1873-74,	•		•	•		•	98	69	155	ı'	1	1	-,-	1	ł	1	- - -	<u> </u>		- 1, 	_		-	
1874-75, .	•	•	•	•		•	61	62	123	ı	1			1	1		?!	ا 	- -		<u>'</u>		-	
. '92-2281	•	•	•	•		•	63	63	156	1	ı	ı	,-		1	<u> </u>	33		<u>'</u>	<u></u> -	<u> </u>		·	
1876-77,	•	•	•	•	•		55	55	110	1	ı	ı	1		1	1	<u>.</u>	1	~	જા.	_			
1877-78, .	•	•	•	•	•		31	77	55	1	1	ı		1	1	1	<u>.</u>	_	<u>'</u>		-	_'		
1878-79,	•	•	•			•	49	*	88	ı	ı	ı	 I	<u> </u>	1		<u>.</u>	_	<u>'</u>	<u>:</u>	_	-		
1879-80,	•	•	٠	•		•	00	47	26	ı	-	_			i	_		_	<u>'</u>		_	_	?i	
1880-81,	•	•	•	•	•	•	48	67	26	9	4	10	1	အ	85	-	- <u>-</u> -				ıç.	-	6	
1881-82, .	•	٠	•	٠		•	20	52	102	-	6	91	4	4	30	တ		9	ຸຄ 	-	→ 		2	
Totals,	•	•	٠			•	1,533	1,558	3,086	<u>8</u>	#	27	<u> </u> 4	12	<u> </u> -	4	18	3 22	<u> = </u>	 	17	=	88	,
		-	1		1	,			-			i	i		-		-		!	ŀ	:	i		1

			•						. •	READ	READMITTED CASES.	o CAS	ES.							REMAI	REMAINING OF RACH	EACH.
			İ	!						giq	DISCHARGED AND DIED IN 1881-82.	D AND	Digo 13	1881	.00					YEAR	YEAR'S ADMISSIONS.	BSTONS.
YEARS.			⋖	Аркітткр.	g.	BEC	RECOVERED.		MUCH IMPROVED.	TMPRO	MD.	TMPR	TMPROVED.	<u> </u>	UNIMPROVED.	OVED.		DIED.		SC E	SRPT. 30, 1882.	
			Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females. Total.	Males.	Females.		Malen.	Females.	Total.	Males.	Feinales.	Total.
1858, 2 months,		•		1		1	1	1		1		-	 I					I	-		2	18
1858-59,		•	4	-	5	•	ı	1		- 1	,		- -		· -	 			-	ლ	-	₹
		•	ι - _	တ	10	-	ı	 I	1	ı	1	 I		· -	· 1	 			ì	7	Ç1	9
1860-61,		•	13	1-	20	1	ī	 I	<u> </u>	ī	-	_ _F			<u>.</u>	-		_ _	1	·	_	4
1861-62,		•	13	ಀ	20 20	•	-	1	<u> </u>	1	-	-	<u> </u>		-				1	-	-	
1862-63,		•	14	11	52	ı	1	1	1	ī	-			· -		<u>'</u>	ا -	-	ı	-	4	9
1863–64, .		•	12	15	22	,	ı	ı	,	1	<u>-</u>	- -	· •	-	<u>.</u>		- -		-	-		
1864-65,		•	10		25	1	ı	1	ī	1	1	1	- <u>-</u>			- '.		1.	١	4	<u>,</u>	٠
1865–66,		•	6	6	18	ı	١	ı	1	,	1	1	· •	<u>.</u>	<u>.</u>	' 	<u> </u>	_	-	2	1	9
1866–67,		•	19	∞	22	ī	1	1	1	ı	1	•	<u>.</u>	<u>.</u>			- 1 		1	64	ဆ	<u>ئ</u>
	•	•	17	13	22	ī	-,-	1	ī	ı			-	. '	'			'	1	e:	7	2
1868-69,		•	13	21	33	,	1	-		1	, . I	_,	-		•				1		9	5

1882.]

9	23	. 19	18	٠ <u>٠</u>	35	31	43	17	16	58	44	73	459
e3	=	Ξ	=	15	11	15	23	∞	00	15	58	98	230
9	12	∞	2	14	81	16	19	6	∞	13	16	37	229
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1	ı	•	1	1	1	ı	-	ı	-	83	87	1	7
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ı	١	ı	-	1	ı	ı	1	1	1	ı	-	1	87
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1	1	1	1	ı	ı	1	1	1	ı	1	١	1	ı
1	1	•	1	1	1	ı	ı	1	ı	ı	-	64	အ
ī	ı	1	1	ŀ	1	1	ı	1	1	1	1	63	63
1	1	1	1	1	1	1	ı	1	1	ı	ı	67	63
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ī	1	t	١	1	ı	ı	ı	1	1	ı	1	-	-
1	1	1	ı	1	1	1	ı	1	1	1	ı	-	-
1	ı	1	1	ı	1	1	ı	ı	i	1	١	1	1
19	8	31	23	38	30	27	53	21	23	18	26	22	572
6	14	13	10	19	16	14	16	12	6	10	17	10	271
2	16	18	13	19	14	13	13	0	14	∞	6	12	301
•	•	•	•	•	•	•	•	•	•	•	•	•	•
	•			•		•	•	•		•	•	•	•
٠			•	•	•	•	•	•	•	•	•	•	•
	•			•	•	•	•	•			•		•
1869-70,	1870-71,	1871-72,	1872-73,	1873-74,	1874-75,	1875–76,	1876–77,	1877-78,	1878-79,	1879-80,	1880-81,	1881-82,	Totals,

One woman discharged as not insane is not included in this table.

24. Relapsed Cases admitted in each Year, and discharged in 1882.

									CASE	3 PRE	VIOUS	CASES PREVIOUSLY RECOVERED IN THIS HOSPITAL.	COVE	RED I	N THE	SOH 8	PITAL.							
												Drsci	HARGEI	AND .	DISCHARGED AND DIED IN 1881-88.	1881	-88-				,	- - -	REMAINING SEPT. 30, 1882.	NG 1882.
	YEARS.	ž			ADA	ADMITTED.		REC(RECOVERED.	-	пссн г	MUCH IMPROVED.		IMPR	IMPROVED.		UNIMPROVED.	oved.		DIRD.			Ì	
						Females.	.IatoT	Males.	Females.	Total.	Males.	Females.	LatoT	Males.	Females. Total.	Males.	Females.	Tôtal.	Males.	Females.	Total.	Males.	Females.	Total.
185£, 2 months,	nths,							1		1	<u>-</u>	 I	1	 I	<u>.</u> 1	<u>'</u>	- I 					 - = = .		l
1858-59,		•				-	81		 I	 I		- I	1	·	<u>.</u>		- <u>-</u>	<u>'</u>	i	. I		1	l 	
1859-60,					- ن0		ۍ	-	ı		- ₋	1	-	 I	<u>.</u>	 1	-! -: ₁ -	<u> </u>	1		ı	' 	1	1
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1869-70, 1870-71, 1871-72, 1872-73, 1873-74, 1874-75, 1875-76, 1876-77, 1877-78, 1878-79, 1878-80, * One woman discharged as not insane does not appear, there being no column for her.

Totals Digitized by Google

1881-82,

25. Classed Average of Patients.

OFFICIA	AL Y	EAR.		State Patients.	Town Patients.	Private Patients.	Total.
Monthly	A	erag	e.				
1864-65,				225.10	48.16	69.83	343.2
1865-66,				252.16	50.58	75.58	378.3
Weekly	Av	erage	₽.				
1866-67,				261.96	49.46	89.75	401.1
867-68,				262.65	47.92	103.06	413.6
1868-69,				248.52	54.98	101.46	404.9
1869-70.				236.19	65.04	107.23	408.4
1870–71,				234.10	77.07	118.38	429.5
871-72,				226.96	89.57	112.27	428.8
1872-73,				248.02	99.23	90.00	437.2
873-74,				284.48	102.88	82.06	469.4
1874-75,				. 274.35	128.34	72.46	475.1
1875–76,				259.19	146.02	68.94	474.1
1876–77,				254.84	161.58	60.02	476.4
1877–78,				211.90	175.71	54.75	442.8
1878–79,				200.34	182.29	54.23	436.8
1879-80,				197.03	198.01	55.46	450.5
1880-81,				180.82	214.15	57.19	452.1
1881-82,				166.84	238.25	56.52	461.6

26. Monthly Consumption of Gas.

		MO	NTHS.					Cubic Feet.	Daily Average
		1	581.				ĺ		1
October, .								33,100	1,067.74
November,								39,200	1,306.66
December,	•		•	•		•	• ;	45,300	1,461.29
		1	882.				1		
January,							.	43,450	1,401.61
February,							. 1	34,000	1,214.28
March,							.	30,700	990.22
April,								22,100	736.66
May, .								14,650	472.58
June, .							.	10,750	358.33
July, .							.	11,700	377.42
August, .							.]	13,950	450.00
September,	•		•		•	•		23,600	786.66
Totals,				_			. [322,500	883.56

^{*} Daily average for the year.

1881-82.
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Year
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Supplies
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27.

l.anterns.		11111-1111111-1	2
Forks.		111101111111111111111111111111111111111	22
Knives.	1-1110111	38 11 11 11 11 11 11 11 11 11 11 11 11 11	59
Syrup Cups.	181111111	1-1111-1111111	2
Pitchers.	801-811-1	H 20 01 H 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	85
Bowls.	141411100	12210111412443211	8
Mugs.	1 1 1 1 2 2 3 1 1	စ၊၊၊စစ္စည္မည္၊၊၊၊၊	8
Tumblers.	841118111	841 18 1 1 1 1 2 1 2 2 1 8 1 2 1 1 1 1 1 1 1 1 1	167
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.edmo')	4000004004	125*55222-252:11	138
Halr-brushes.	11101-0	111111111111111	6
Storrik.	1111111	1211-111-12111	6
Сімпретв.	65241142200°4	1001122008201111	380
Ewers.	11111111	-01111111111	rc.
Wash-bowla.	!!!!!	-8111-111111	=
Curtains.	124 10 1 10-1	œ७७44।।।∞~४७48	16
Towels.	440480044	81230 4 8 1 4 1 4 1 1 8 8 1	272
Pillow-ticks.	21-21-22	11-1101111-11-	16
Bed-ticks.	004151-08	44-4-2848 191	143
Rubber Sheets.	1-110111	123111403101111	22
Blankets.	2.13.82.13	8208240811181	155
Bed-spreads.	99199191	01000044011111111111111111111111111111	88
Pillow-cases.	5884352440	5555454 - 5845 - 8 -	415
Spects.	1835 18222	55 1 2888 25 2 2 2 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2	349
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	Rabber			13
	Papers Pins.	184114111	12. 12. 12. 12. 12. 12. 12. 12. 12. 12.	107
	Papers Needles.	11111-111	144000041-0001111	æ
	Skeins Linen Thread.	1111111	1114	9
	Spools Thread.	11-01600	118 6 27 9 9 8 8 4 1 1 1	173
	Врое-ртивреь.	011010000	111111111-11-111	7.
	Blacking.	22223222	111111111	152
for the Several Departments for the Year 1881–82. — Concluded	.snoottiq2.	11-11-8	11111111-1-1011	9
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מינו	Soap, pounds.	22 22 228	844444884683648	
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verc	Tin Cups.	111191191	1181118811111111	88
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٩	Table-spreads.	11111111		<u>.</u>
ones	Glass Casters.	141144111	111111-10111111	12
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		Men's Dep lst Hall, 2d Hall, 3d and 4th e lst Hall, 3d and 4th lst Hall, 2d Hall, 3d and 4th	Hall, Hall,	Aggregate,
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1882.]

SEWING-FARM. KITCHEN. LAUNDRY. ROOM. MONTHS. Women. Men. Men. Women. Total. Women. Men. Total. 1881. October, November, . December. 1882. January, February, March, . April, . May, June, . July, August, September, 2,735 1,898 4,354 Totals, 7,274 1,583 4,318 3,852

28. Days' Work by Patients.

The patients, whose work is recorded in this table, were employed as many hours in the day as were the employees in each of the several departments respectively. The total number of days' work is 17,844, to which may be added 702 days by men, in the mattress room, making an aggregate of 18,546 days. No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler-room, and the carpenter's shop. A large amount of other work is done both in the halls, and, at irregular times, out of them.

29. List of Articles made in the Sewing-room.

Dresses, .			•	238	Straw-ticks, 70
Chemises, .				120	Mattress-ticks, 69
Drawers, .			•	48	Feather ticks
Skirts,				86	Bed-spreads, 1
Waists, .				10	Towels, 36
Sacques, .				18	Towels (roller), 29
Night-gowns,				15	Table-cloths, 1
Hats (trimmed	l),			39	Waiter-spreads,
Undervests,		•		4	Curtains,
Shirts, .				254	Carpets,
Duck pants,				1	Carpet-strips (hemmed), . 2
Suspenders,		•		157	Clothes-bags, 2
Collars, .				236	Handkerchiefs (hemmed), 1
Aprons, .				164	Spreads (hemmed), 6
Sheets, .				376	Napkins (hemmed), . 20
Pillow-cases,				512	Ox blankets,
Bolster-cases,				18	Holders, 672
Pillow-ticks,				38	Articles repaired, 23,44
Bolster-ticks,				3	

30. Upholstery done in the Year.

Hair mattresses made, new materials, .				•	15
Hair mattresses made, new ticks,					44
Hair mattresses made, old ticks, new hair,					8
Husk mattresses made, new materials, .					48
Husk mattresses made, new husks, .	•		•		60
New husk under-beds made, new materials,	, .				37
Old under-bedticks filled with new husks,					118
Hair pillows made, new materials, .					20
Hair pillows overhauled, hair repicked, .					27
Old pillow-ticks filled with new hair, .					8

31. Annual Cost of Gas.

			<i>U1</i> .	21/6/6	-	Cost of G		
	Y	EAR.				Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860–61, .						\$2,030 39	814.26	\$6 4 6
1861–62, .	•	•				2,085 29	313.80	6 64
1862-63, .				•		2,109 02	355.63	5 98
1863–64, .	•				•	2,069 79	357.6 3	5 78
1864–65, .		. •				1,653 05	342.40	4 82
1865–66, .						1,107 98	376.35	2 94
1866–67, .	. •				•	1,056 16	401.03	2 68
1867–68, .						1,022 51	413.41	2 47
1868–69, .		•				903 92	405.10	2 28
1869–70, .						915 30	408.83	2 28
1870–71, .						1,043 99	421.90	2 47
1871–72, .						980 94	428.72	2 28
1872–73, .	•					1,006 61	437.23	2 30
1878–74, .						1,066 74	469.54	2 2
1874–75, .						1,012 63	475.35	2 15
1875–76, .				•	•	1,089 82	474.21	2 29
1876-77, .		'				1,033 59	476.16	2 17
1877–78, .						1,066 02	442.43	2 4
1878–79, .					•	1,033 05	436.73	2 3
1879–80, .						945 00	450.51	2 10
1880–81, .						949 65	451.79	2 10
1881–82, .						919 13	461 66	2 00

The hospital has always been supplied with gas by the Northampton Gas Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since that time it has been but \$3.00, including meter-rent, and, during the last two years with a discount of 5 per cent.

32. Trustees of the Northampton Lunatic Hospital.

NAME.	Residence.	When app'ted.	Service ended.	From what cause.
Charles E. Forbes,* .	Northampton, .	1856	1857	Term expired.
Lucien C. Boynton, .	Uxbridge,	1856	1858	do do.
Eliphalet Trask, .	Springfield, .	1856	1875	do. do.
John C. Russell,* .	Great Barrington,	1856	1859	Resigned.
Horace Lyman,	Greenfield,	1856	1857	Removed.
Charles Smith,	Northampton, .	1857	1860	Resigned.
Luther V. Bell,* .	Somerville, .	1857	1859	do.
Zebina L. Raymond,*	Greenfield,	1858	1859	do.
Franklin Ripley,* .	Greenfield,	1859	1860	Died in office.
Edward Dickinson,*	Amherst,	1859	1864	Resigned.
Walter Laflin,* .	Pittsfield,	1859	1866	Term expired.
Silas M. Smith,	Northampton,	1860	1863	do. do.
Charles Allen,	Greenfield,	1860	1861	Resigned.
Alfred R. Field,*	Greenfield,	1861	1864	đo.
Edward Hitchcock, .	Amherst,	1863	1879	do.
Silas M. Smith, .	Northampton,	1864	_	Still in office.
Edmund H. Sawyer,*	Easthampton, .	1864	1879	Died in office.
Henry L. Sabin, .	Williamstown, .	1866	1876	Term expired.
Adams C. Deane, .	Greenfield,	1875	_	Still in office.
Henry W. Taft, .	Pittsfield.	1876	_	do. do.
William M. Gaylord,	Northampton,	1879	_	do. do.
Lyman D. James, .	Williamsburg.	1879	_	do. do.

^{*} Deceased.

33. Officers and Employés.

Time employed, March 1, 1882.

		Months.	Days
		<u> </u>	
Pliny Earle, M.D., Superintendent,	17	7	26
Edward B. Nims, MD, 1st Ass't Physician,	13	2	14
Daniel Pickard, M.D., 2d Ass't Physician, .	4	10	22
Walter B Welton, Clerk,	16		14
John Mercier, Farmer,	14	8	_
Danford Morse, Engineer,	17	-	7
Robert H Gallivan, Supervisor,	8	. 10	11
	15	. 10	18
Lucy A. Gilbert, Supervisor,		1 -	24
F. Josephus Rice, Steward,	23	4	3
Mary Ward, Seamstress,	11	6	-
Ella E. Nelson, Laundress,	-	6	8
Charles Ziehlké, Baker,	19	6	_
Frances C. Earle, Assistant Clerk,	9	11	6
Minnie J. Guilfoil, Assistant Supervisor, .	3	5	24
Fannie R Sawyer, Assistant Seamstress, .	_	7	10
Victoria S. Pillinger, Assistant Laundress, .	5	8	9
Perry Davis, Attendant,	12	4	16
James H. Neill, Attendant,	6	7	21
Walter E. Pillinger, Attendant,	7	9	29
Richard F. Neill, Attendant,	4	6	26
Michael W. Powers, Attendant,	3	10	6
Willard C Filia Attendant	2	7	_
Willard C. Ellis, Attendant,		-	06
Eugene C. Wilbur, Attendant,	1	11	26
George E. Rood, Attendant,	· 1	4	14
Don F. Boutelle, Attendant,	-	9	2
Edward Conners, Attendant,	-	8	9
Peter Donahue, Attendant,	-	5	20
Maria E Graves, Attendant,	14	1	7
Martha R. Harris, Attendant,	7	6	7
Jane McGuire, Attendant,	6	10	3
Mary B. Ransom, Attendant,	6	3	15
Hannah Merrifield, Attendant,	6	2	26
Nellie M. Henchy, Attendant,	ĕ	2	2
Coolla Rial Attendant	5	4	23
F. F. Poor, Attendant,	3	4	13
Naomi A Criffin Attendant	1	9	21
Naomi A. Griffin, Attendant,	1	:	16
Mary M. Dudley, Attendant,	-	11	
Edna A. Wales, Attendant,	-	11	2
Emma Crowell, Attendant, .	-	9	-
Jessie A. Rand, Attendant,	-	8	11
Laura G. Barrett, Attendant,	-	8	4
Barbara McDonald, Attendant,	_	7	9
Mary J. McNabb, Attendant,	_	7	9
Emily A. Drew, Attendant,	-	- 1	14
Hattie Halladay, Farmers' Dining Room, .	7	7	14
Katie M. Aldrich, Centre,	i	10	8
Ida R Howes, Centre,	$\hat{2}$	6	18
		11	11
Thomas C. Powers			
Thomas C. Powers,	7	ii	14

Officers and Employés. — Concluded.

NAME.	Years.	Months.	Days
Lillian M. Works, Assistant Cook, .		4	22
Delphine Tetro, Assistant Cook,	. -	_	16
H. Frank Haskell, Assistant Cook, .	. 1	3	4
William C. Hall, Assistant Engineer, .	. 16	5	17
Nicholas Riel, Night Engineer,	. 6	2	25
Andrew N. Thorington, Watchman,	. 11	1 1	30
Sifroi Belville, Carpenter,	. 11	10	7
Walter Tower, Carpenter,	. 5	3	_
Alfred Parenteau, Painter	. 16	6	18
David Mercier, Coachman,	. 5	_	14
Charles Egen, Assistant Baker,	. 4	5	4
Benjamin Rockwell, Assistant Farmer,	. 14	9	_
Elson E. Howes, Assistant Farmer, .	. 4	11	23
Julius Freeman, Assistant Farmer, .	. 4	7	24
Henry Wilson, Assistant Farmer, .	. 2	10	8
Erie L. Ditty, Assistant Farmer,	. ī	ğ	26
William Simpson, Assistant Farmer, .	<u> </u>	5	

TWENTY-EIGHTH ANNUAL REPORT

OF

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT NORTHAMPTON,

FOR THE YEAR ENDING SEPTEMBER 30, 1883.

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 Post Office Square.
1884.

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OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

SILAS M. SMITH, Esq., .					NORTHAMPTON.
ADAMS C. DEANE, M.D.,					GREENFIELD.
HENRY W. TAFT, Esq.,					PITTSPIELD.
LYMAN D. JAMES, Esq.,					WILLIAMSBURG.
CHRISTOPHER C. MERRITT	, E	8Q.,			SPRINGPIELD.

RESIDENT OFFICERS.

PLINY EARLE, A.M., M.D.,	•	•	•	SUPERINTENDENT.
EDWARD B. NIMS, M.D., .				Assistant Superintendent.
DANIEL PICKARD, M.D., .				FIRST ASSISTANT PHYSICIAN.
DAVID G. HALL, M.D., .	•			SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON, .				CLERK.
JOHN MERCIER,				FARMER.
DANFORD MORSE,				Engineer.

TREASURER.

PLINY EARLE, .	•	•		•		•	•	•	NORTHAMPTON.
		C	ffice	at th	е Но	spita	l.		

SUBORDINATE OFFICERS.

ROBERT H. GALLIVA	N,	•	•	•	•	•	•	MALE SUPERVISOR.
LUCY A. GILBERT,			•	•				FEMALE SUPERVISOR.
F. JOSEPHUS RICE,		•	•		•			STEWARD.
MARY E. WARD, .							•	SEAMSTRESS.
MINNIE J. HOWES,				•				LAUNDRESS.
CHARLES EGAN, .								BAKER.

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Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor of the Commonwealth and the Honorable Council:

The undersigned, as Trustees of the Northampton Lunatic Hospital, have the honor hereby to present to you their report of the proceedings of that institution during the official year ending with the close of September, 1883. It is the twenty-eighth annual report since the buildings of the hospital were begun, and the twenty-sixth since they were opened for the reception of patients.

On the morning of the first of October, 1882, the beginning of the official year, the number of patients in the house was 459, of whom 229 were men and 230 women. In the course of the intervening year the number of admissions was 147, of which 78 were of men and 69 of women. The whole number, therefore, of patients who were under the care of the hospital, for either the whole or a part of the year, was 606, of whom 307 were men and 299 women.

The whole number of patients discharged in the course of the year, aside from those who died, was 107, of whom 60 were men and 47 women. Of deaths there were 30; 17 of them being of men and 13 women.

The number of patients remaining in the house on the 30th of September, 1883, the end of the official year, was of men 230 and of women 239, a total of 469. The daily average for the year was of men 235 and of women 231, and of both sexes 466. The largest number in the hospital on any day in the course of the year was 485, on each of three days in

June, and the least number on any day 452, on the 4th of December. 1882.

Of the 107 patients who were discharged in the course of the year, the result of treatment was recorded as recovered in 28, much improved in 9, improved in 33, unimproved in 35, and not insane in 2.

In our annual report for 1881-82, it was mentioned that a new roadway had been laid out through the North grove, that some work had already been done upon it, and that it was hoped to make it passable before the close of the current year. In this hope we were disappointed. The ground was frozen up unusually early, and so soon after the harvest was finished that little could be done to it, and it became necessary to suspend the work for the winter. As early as practicable, however, in the spring, it was resumed, and the road finished in the early part of June. The distance by this road from the barn to the old ice-house, and to the whole northeastern section of the farm, is but little more than half as great as by the old route over the county road.

The pond made upon the premises in 1882, for the purpose of supplying the hospital with ice, proved a success. Fed by springs and by the surface water of its immediate vicinity, it was soon filled; and it furnished more than the necessary quantity of the purest quality of ice.

In the spring designs were made for a building, the basement of which is intended to supply a much-needed cellar for garden roots and other vegetables, and the stories above, a large store-room, a paint shop and a mattress shop, together with room for other purposes. After the site was fixed upon, it was found that the main sewer - of the exact route of which no chart had been left by the builders of the hospital -- runs under a part of it. The sewer was of stone and consisted of two upright walls with the intervening space covered. Upon an examination of it, it was found to be so defective as to threaten a closing up by the caving in of the Under these circumstances it was believed that the true course to be pursued was to make this drain perfectly About one hundred feet of the old sewer was taken up and replaced by a cylindrical brick tube, two feet in diameter, the walls of which are nowhere less than eight inches in thickness, while in some parts they are twelve. As the bottom of the sewer is about seventeen feet below the surface, the quantity of earth to be excavated was large. The work was, however, prosecuted to completion without any untoward accident or important hindrance. The season was then so far advanced that further work upon the projected building was postponed until the coming spring. One of the desired improvements mentioned last year is that of a woodhouse detached from the hospital. This want is about to be supplied by an extension of the scullery, which is now in progress.

At the southeast corner of the farm, near the West Street bridge, is a tract of land with three small dwellings, which, as it belonged to other owners, has heretofore prevented the hospital farm from a desirable completeness of form, by bringing its boundary to the road upon its southern line and to the river upon its eastern line. As this property came into market, we believed it to be for the best interests of the hospital to acquire it, and it was consequently purchased.

The charges made for the board of patients, which constitute the earnings of the hospital, for the official year, were as follows:

For State patients,				\$27,401 69
town patients,				41,703 05
private patients,	•	•	•	15,237 14
Total, .				\$ 84,341 88

The Treasurer's annual report, made out in the more detailed form which was adopted two years ago, has been received and audited, and is hereto appended. According to the balances of the accounts, it appears that, at the close of the fiscal year, Sept. 30, 1883, there were:—

The reserve fund, And cash assets available for futu				
Total,				\$38,409 86
And liabilities (bills payable),	•	•	•	6,088 75
Balance in favor of the hospital,				\$32,321 11

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Aside from these still available cash assets, the hospital has in store a quantity of *purchased* provisions and supplies, valued at \$16,618.94; together with all the unconsumed hay, grain and vegetables grown upon the farm in the current calendar year.

The corps of resident and administrative officers remains the same as at the beginning of the year, and the condition of the institution is in all respects as satisfactory as at any former period.

S. M. SMITH.
A. C. DEANE.
HENRY W. TAFT.
L. D. JAMES.

NORTHAMPTON, Oct. 4, 1883.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE NORTHAMPTON LUNATIC HOSPITAL SEPT. 30, 1883.

Superintendent and physician	1,				. per year,	\$2,500	00
Assistant superintendent and	l phy	siciar	1,		. "	1,500	00
					. "	900	00
Second assistant physician,					. "	600	00
Treasurer,					. "	800	00
Treasurer, for clerk-hire and	paid	to a	clerk	,	. "	200	00
Clerk,					. "	900	00
Farmer,					. "	600	00
Engineer,					. "	900	00
Assistant clerk,					. per month,	30	00
Supervisor (male), .					. "	40	00
Supervisor (female), .					. "	25	00
Assistant supervisor (female),				. "	20	00
Seamstress,					. "	20	00
Assistant seamstress, .					. "	14	00
Laundress,					. "	18	00
					. "	18	00
Baker,					. "	25	00
Steward,					. "	54	17
Assistant steward,					. "	35	00
Attendants (male) (1),					. "	30	00
Attendants (male) (3),	•				. "	28	00
Attendants (male) (4),					. "	25	00
Attendants (male) (2),					. "	23	00
Attendants (male) (3),					. "	21	00
Attendants (female) (11),					. "	18	00
Attendants (female) (1),					. "	16	00
Attendants (female) (1),					. "	15	00
Attendants (female) (3),					. "	14	00
Night-watch (female), .					. "	18	00
Housework, centre (female)					. "	15	00
Cook (female) (1), .					. "	16	00
Assistant cook (male) (1),					. "	16	00
Assistant cooks (female) (8					. "	15	00
, , ,							T

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Farmers' dining-	room	(fen	nale)	(1)	, .	. per month,	\$15	00
Housework, rear	build	ing (fema	ale)	(1),	. "	8	00
Watchman, .			•	•	`,	. "	30	00
Carpenter, .						. per day,	2	25
Carpenter, .						. "	2	00
Painter,						. per month,	50	00
Assistant enginee							32	00
Night engineer, a		arden	er ir	sum	mer,	. "	30	00
Coachman, .						. "	28	00
Farm hands (5),						. "	28	00
Farm hand (1),							25	00
Farm hand (1),						. "	23	00

In the warm season we generally hire some farm hands by the day. This year we have four, at \$1.50 per day, without board. They work mostly on improvements of the farm.

INVENTORY OF STOCK AND SUPPLIES

ON HAND SEPT. 30, 1883.

Live-stock on the farm,										\$5,797	ΔΔ
•						•	•	•	•		
Produce of the farm on h						•	•	•	•	6,353	
Carriages and agriculture	al	implem	en	ts,	•	•			•	3,825	00
Machinery and mechanic	al	fixtures	3,					•		9,140	00
Beds and bedding in inm	at	es' depa	rtı	ner	ıt,					12,050	00
Other furniture in inmate	8	departn	nei	nt,						4,830	00
Personal property of Stat	te	in Supe	eriı	nter	ade	nt's	depart	mer	ıt, .	9,145	00
Ready-made clothing,	•						•			2,121	17
Dry goods,		•						•		4,009	63
Provisions and groceries,										3,700	94
Drugs and medicines,		•								650	00
Fuel,										6,888	00
Library,										850	00
Paints and oils,		•	•					•	•	300	00
Total,		•								\$69,659	74

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital:

The following statement presents a summary account of the receipts and the disbursements for the official year 1882– 83, and shows the present financial condition of the Hospital.

ASSETS.

Three hundred and forty acres of land,								\$43,000	00		
Hospital buil	ding	z,						250,000	00		
Farm-house,	\$2,0	00;	bric	k∙ho u s	se, \$	2,000,		4,000	00		
Three dwelli	ngs	(H.	Day	lot),				1,500	00		
Two barns,								5,500	00		
Stable, .								2,000	00		
Other buildin	gs,							6,000	00		
									-	\$ 312,000	00

PERSONAL ESTATE.

Stock and supp	lies on	hand,	as	per	inven	tory	appe	nded	lo		
the Trustees'	report,							•		\$ 69,659	74
Reserve fund,							•			10,000	0 0

RECEIPTS.

Cash on hand Sept. 30, 1882	?,					5,988 17
Received from the State Tre	easu	rer,				27,518 65
from towns, .						44,028 (8
from individuals,						14,656 52
from sales, .						2,166 38
from interest,					•	732 45

\$95,090 25

PAYMENTS.

1st.	Salaries and labor,			\$26,986	20
2d.	Provisions and supplies, viz.: -			•	
	Meats of all kinds,	\$6,966	10		
	Fish of all kinds,	1,627	98		
	Fruit and vegetables,	2,592	57		•
	Flour,	4,660	88		
	Grain and meal for table,	817	57		
	Grain and meal for stock,	1,870	88		
	Tea, coffee and chocolate,	899	43		
•	Sugar and molasses,	2,669	48		
	Butter and cheese,	4,490	46		
	Salt and other groceries,	2,720	3 0		
	All other provisions,	391	02		
	•		_	29,706	62
3d.	Clothing,			4,710	88
4th.	Fuel and lights,			8,364	01
5th.	Medicines and medical supplies, .		•	1,519	82
6th.	Furniture, beds and bedding,	•		2,519	88
7 t h.	Transportation and travelling expenses,		•	320	57
8th.	Ordinary construction and repairs, .			2,733	17
9th.	Extraordinary construction and repairs,		•	2,205	81
10th.	Real estate,			4,513	00
11th.	Miscellaneous expenses, including —				
	1. Farm stock,	\$1,145	10		
	2. Farm supplies,	2,506	03		
	3. Water,	750	00		
	4. Minor expenses,	443	47		
	5. Contingencies,	1,099	20		
			-	5,943	80
~	-4-1 3!4			2 00 500	
1	otal expenditures,	• •	•	\$ 89,523	10
	_				
	Liabilities.				
Salari	es and wages due Oct. 1, 1883,			\$3,636	43
	lancous bills due,			2,372	32
					_
Dun 41	on institution for board Oat 1 1000.			\$6, 008	75
	e institution for board Oct. 1, 1883:	\$7,097	9.4		
11	towns,	11,710			
	individuals,	3,935			
	interest,	100			
Dec 6	m	5,566			
Due I	om Treasurer, Sept. 30, 1883,	0,000	4 3	8 00 400	96
		Die	utizoo	\$28,409 B by G OC	
		DΙζ		i by CiCC	310

SUMMARY.

Total receipts,										\$95,090	25
Total payments,	•	•	•	•			•	•	•	89,523	76
Cash on hand Sep	p t . 30	, 1883	,			•		•		\$5,566	49
Total liabilities,										\$6,008	75
Total debts due t	he ins	stituti	on,							28,409	86
Total expenditure	e s ,									89,523	76
Dividing this sum									nts,		,
we have the av	erage	expo	endit	ure	per p	atien	t, .	•		191.	798
And the average								of.	•	3.	688
Deducting from t	he to	al ex	pend	ditur	es,					\$89,523	76
The extraordinar	y exp	enses	3,	•	•		•		•	6,718	81
We have the										\$82,804	95
Dividing \$32,804	.95 by	7 466.	76, t	he a	vera	ge nu	ımbe	rof	pa-		
tients, we have	the a	verag	ge ex	cpen	ditur	e per	patie	ent,		\$ 177	40
Making the avera	ige w	eekly	exp	endi	ture	per p	atier	ıt, .		3.	411
Deducting from t	he cu	rrent	cast	exp	endi	ture,				\$82,804	95
The increase of p	person	al as	sets.	, .		•	•	•	•	804	95
We have the Dividing \$92,000.							•	•		\$82,000	00
tients, we have										175.0	679
Making the avera								•		3.	301

PLINY EARLE, Treasurer.

NORTHAMPTON, Oct. 4, 1883.

We have audited the Treasurer's accounts and found a proper voucher for every entry.

A. C. DEANE, L. D. JAMES.

NORTHAMPTON, Oct. 4, 1883.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital:

The general movement of the population of the hospital, and the principal leading facts in its medical history for the year just closed, are embodied in the following table:

7	(Janara)	Statistics.	1999_93
1.	Generai	Dialistics.	1002-00.

	Males.	Females.	Totals.
Patients in hospital Oct. 1, 1882,	229	230	459
Admitted within the year,	78	69	147
Whole number of cases within the year,	307	299	606
Discharged within the year,	77	60	137
Viz.: as recovered,	11	17	28
much improved	9	_	9
improved,	18	15	33
unimproved,	21	14	35
not insane,	1	1	2
Deaths,	17	18	30
Patients remaining Sept. 30, 1883,	230	239	469
Viz.: supported as State patients,	83	75	158
town patients,	119	134	253
private patients,	28	30	58
Number of different persons within the year,	803	295	598
admitted.	77	65	142
recovered	ii	17	28
Daily average number of patients,	235.57	231.19	466.76

The whole number of admissions in the course of the year was, as shown above, 147, of which 78 were of men and 69 of women. These admissions, however, do not accurately represent the number of different persons admitted. One of the men and 4 of the women were received twice each, making 10 admissions of 5 persons. The whole number of

persons admitted was consequently 142, or 5 less than the number of admissions.

Of the persons admitted, 77 were men and 65 women.

The whole number of patients in the house, within the year, was 606, of whom 307 were men and 299 women. This, of course, included the 229 men and 230 women, a total of 459, who were here at the commencement of the year. But 3 of these, all of them men, were subsequently discharged and admitted again within the year. They were counted at the beginning of the year, and again counted upon re-admission. In this way the whole number of persons is reduced by 3 below that of the whole number of patients. As already mentioned, there is a similar reduction of 5 persons, in consequence of the admission of 5 persons twice each. Hence the whole number of persons in the house, in the course of the year, was only 598, or 8 less than the whole number of patients.

Of the 5 persons who were admitted twice each, only one was discharged recovered on the first of those admissions; and of the 3 who were here at the beginning of the year, but afterwards discharged and readmitted, no one was discharged recovered.

Of the 142 persons admitted, no less than 13 men and 16 women, a total of 29, or a fraction more than one-fifth of the whole, have been inmates of the institution more than once each. Twenty-two of them, 11 of whom are men and 11 women, have been here twice each; 1 man and 2 women three times each; 1 woman four times; 2 women five times each; and 1 man ten times.

Of the 22 who have been admitted twice each, only 5, and all of them women, were discharged recovered on their first admissions. Five men were discharged much improved; 2 men and 6 women as improved, and 4 men as unimproved.

Of the 3 who have been admitted three times each, the man had been discharged twice as unimproved; 1 woman as much improved twice, and the other woman as improved once and unimproved once.

The woman who has been admitted four times, was discharged improved once, and unimproved twice.

Of the 2 women who have been admitted five times each,

one of them has been discharged recovered three times, and much improved once. The other had been discharged as much improved once, and improved three times.

The number of patients or cases admitted exceeded by 23 that of the next preceding year; and the same is true of the number of persons admitted.

The number of patients remaining in the hospital at the close of the official year, is larger by 10 than it was at the close of the next foregoing year.

Three days before the end of the year, 5 patients belonging in Lowell were transferred to the department for the insane connected with the new almshouse of that city.

The daily average number of patients for the year was larger by 5 than in 1881-82.

STATUS OF PATIENTS.

Of the 147 patients who were admitted in the course of the fiscal year, the expense of the support of 41 was charged to the Commonwealth, that of 78 to cities and towns, and that of 28 to the relatives, friends, guardians, or agents of the persons respectively. Only one change of this status was afterwards made in regard to any patient supported either by the State or by a city or town. In this case the transfer was from State to town. In two instances, patients whose expenses were originally paid from private funds, had their support transferred, in one of them to a city, and in the other to a town.

Including deaths, the whole number of patients discharged within the year was 137. Of these, the Commonwealth was responsible for the support of 37. Cities and towns paid for 79, and individuals or private funds for 21.

At the close of the year the number of patients remaining in the hospital was 469. One hundred and fifty-eight of them are supported by the State; 253 are beneficiaries of cities and towns, and 58, on the list of boarders, are chargeable to their friends, or other representatives of private responsibility.

In several of the foregoing annual reports allusion has been made to the continual change in the relative proportions to each other, and to their total, of the three classes of

patients mentioned. Of late years there has been but little variation, either in numbers or in relative proportion, of the class that derive their support from private sources; but in respect to the other two classes, there has been a constant augmentation in numbers and proportion of those who are chargeable to cities and towns, accompanied by a corresponding reduction of those who are wards of the Commonwealth. The weekly average number of each of the three classes, during each of the last two official years, is shown in the subjoined table.

		1881-82.		1882-82.				
	 Males.	Females.	Total.	Males.	Females.	Totals.		
State patients, .	88.71	78.13	166.84	87.34	74 28	161.62		
Town patients, .	112.78	125.46	238.25	118.98	128.65	247.63		
Private patients,	28.98	27.53	56.52	29.26	28.32	57.58		

By these statistics it appears that, during the official year covered by this report, the average number of patients drawing their sustenance from the treasury of the Commonwealth was less by five than in the next foregoing year; and that of those who are the beneficiaries of cities and towns, was increased by ten. The change in the proportion of private patients was very slight, there being an increase of a small fraction more than one.

By reverting to a somewhat remote period in the history of the hospital, the variation in the several classes of patients can be more strikingly illustrated. Fifteen years ago, at the close of the official year which terminated with the 30th of September, 1868, there were 408 patients in the house. Of these, the Commonwealth was charged with the support of 258, and cities and towns with that of 51; while no less than 106 were supported by private funds. At that time there were many of the class last mentioned whose residences were in other States than Massachusetts. Now there are very few.

RECOVERIES.

Judging in accordance with our standard of mental health, and our opinions in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncrasy, education and habits, twenty-eight of the patients who were discharged from the hospital within the official year were in a mental condition which justified the record "recovered." This number is coincident with that of the recoveries in the next foregoing year. Eleven of these patients were men, and seventeen women. As no one of them was discharged recovered more than once, the number of persons was the same as the number of patients. In twenty-three of the twenty-eight cases the persons were in the hospital on their first admission. One man and one woman were here on their second admission, and both of them had been discharged recovered on their first admission. Two women were here on their third admission. One of them had been discharged as recovered upon both of her former admissions, and the other as much improved on both former admissions. One woman. who was here on her fifth admission, had been discharged recovered on each of the preceding four admissions. five persons have now been reported as recovered thirteen times.

Although, as before mentioned, the number of recoveries was the same as in the next preceding year, yet, inasmuch as the number of admissions was larger than in that year, the proportion of recoveries was necessarily less. It was 19.71 per cent. of the persons admitted.

The readers of the reports of the hospitals for the insane within the Commonwealth have become so familiar, by its reiteration, with the fact that, in a very large majority of the patients brought to those institutions, the disease with which they are afflicted is either incurable from its very origin or has become so by consequence of its duration, that it seems like more than a "thrice told tale" to repeat it again. To look for a cure of this great mass of organic disease of the brain, nearly exhausted vitality, and broken-down constitutions, is to expect the unattainable. There is a limit to medical possibilities, as there is to the possibilities in every other

sphere of human action. There is, however, one cause which limits the recoveries to a point below the possible. A frequent unwillingness to submit the patient to a sufficiently protracted treatment has probably always, since the origin of hospitals, existed. It still exists, and will doubtless continue, to say the least, for a long time to come. Hence, in a no inconsiderable number of cases, the patient is prematurely removed, and the physician, where he hoped and expected a recovery, is obliged to content himself with the record "improved," or "much improved."

Of the patients who recovered, seven were wards of the State, sixteen were chargeable to cities and towns, and five were supported by private funds.

DEATHS.

Seventeen men and thirteen women, a total of thirty, died at the hospital in the course of the official year. Consumption, the disease which in point of numbers almost invariably stands at the head of the column of mortality, retains its usual position, with three men and six women, a total of nine. Next comes the exhaustion of chronic mania, a condition in which there is a general impairment, enfeeblement and wasting away of the whole body, in consequence apparently of the deficiency of vital energy coming from a diseased To this the record gives five, of whom three were Paresis, or the paralysis of the men and two women. insane, a still more incurable, but a vastly less frequent disease than consumption, and which is very rarely found in women, holds the third place, with three victims, all of whom were men. One man and two women died from the debility and decay of old age; one man and one woman of epilepsy; two men of apoplexy, and one man and one woman of inflammation of the bowels. Of the four other deaths, there was one each of the same number of diseases, as shown in table eighteen of the appendix.

Although, among the patients admitted, there was a pretty large number having the propensity to self-destruction, which in some of them was of the most determined and persistent character, yet the year was passed without the accomplishment of the purpose by any one of them.

The hospital has been in operation twenty-five years, and hitherto the whole number of suicides in its history is 18. Twelve of them were by men and six by women. Eleven of them took place in the course of the first twelve years, and seven in the course of the last twelve, there being none in the middle year of the period. Thus the actual number of deaths in this way, in the earliest twelve years, exceeded by more than sixty per cent. the number in the latest twelve. But the average number of patients in the house during the former of these two periods was only 347.61, whereas, during the latter it was 455.92, or an excess of not more By computation from these numbers, it is shown that the proportion of suicides, as compared with the average number of patients in the house, was more than twice as great during the first twelve years as it was during the last twelve.

The greater mortality of men than of women has again been illustrated by the history of the year just closed. The difference, however, between the two sexes, was not so great as in the next foregoing year. Of the 303 men who were treated within the year, 17 died. This was equal to 5.61 per cent. Of the 295 women, 13 died; which was but 4.40 per cent. If the proportion be calculated upon the daily average number of patients in the house, which is generally believed to be the most correct method, the percentage of the deaths of men was 7.21, and that of women 5.62.

Of the 30 patients who died, 8 were supported by the State, 17 by cities and towns, and 5 by individuals, or private funds.

A general mortuary record of the hospital, from the time at which it was opened to the end of the official year covered by this report, is contained in the following table:—

Deaths and their Ratios from Sept. 30, 1858, to Oct. 1, 1882.

OFFICIAL	Whole	Daily Average		DEATHS.		Per cent. on Whole No.	Per cent. on	
YEAR.	No. of Patients.	No. of Patients.	Men.	Women.	Total.	of Patients treated.	No. of Patients	
1858-59,	313	229.55	7	12	19	6 07	8.27	
1859-60,	398	255.96	9	18	27	6.78	10.54	
1860-61,	434	314.26	15	15	30	6 91	9.54	
1861-62,	442	313.80	9	10	19	4.29	6.05	
1862-63,	470	355.28	19	7	26	5.53	7.31	
1863-64,	475	357.63	17	30	47	9.89	13.14	
1864-65,	469	342.40	17	24	41	8.76	11.97	
1865-66,	488	376.35	18	13	31	6.35	8.23	
1866-67,	543	401.03	23	24	47	8.65	11.71	
1867-68,	565	413.41	25	18	43	7.61	10.40	
1868-69,	590	405.10	13	12	25	4 23	6.17	
1869-70,	604	408.83	22	11	33	5.46	8.07	
1870-71,	616	421.90	16	12	28	4.54	6.64	
1871-72,	619	428.72	19	18	37	5.97	8.63	
1872-73,	614	437 23	13	8	21	3 42	4 80	
1873-74,	626	469.54	14	11	25	3.99	5.32	
1874-75,	629	475.35	23	18	41	6 52	8.62	
1875-76,	629	474.21	18	19	87	5.88	7 80	
1876-77,	603	476.16	21	21	42	6.96	8.82	
1877-78,	551	442.43	14	9 1	23	4.17	5.19	
1878-79,	535	436.73	14	9	23	4.29	5.27	
1879-80,	559	450.51	17	12	29	5.19	6.44	
1880-81,	569	451.79	16	10	26	4 57	5.75	
1881-82,	587	461.66	24	14	38	6.47	8.23	
1882-83.	606	466 76	17	13	30	4.95	6.42	

By an examination of this table it will be seen that in only eight of the twenty-five years was the percentage of deaths, as calculated upon the whole number of patients, smaller than in the year just ended; and in only seven of the years, as calculated upon the daily average number of patients in the house.

The subjoined tables, illustrative of the relative mortality of this year as compared with that of the whole period of the existence of the hospital, and with two subordinate periods, are similar to those given in the annual report for 1881-82.

As calculated upon the whole number of patients under treatment, the mean or average mortality was, —

For the whole period of twenty-five years,	•	5.82 per cent.
For the first twelve years,		6.71 "
For the last twelve years,		5.22 "
While for the last year the mortality was,		4.95 "

As calculated upon the daily average number of patients in the hospital, it was,—

For the whole period, .					•	7.82 p	er cent.
For the first twelve years,						9.28	66
For the last twelve years,						6.76	66
While for the last year the	mort	tality	was			6.42	46

By either method of calculation,—and the latter, as before stated, is considered the most correct,—the proportion of deaths in the last official year is shown to be less than in either the whole period, or the last period of twelve years, and very much less than in the first period of twelve years.

WORSHIP AND ENTERTAINMENT.

In continuation of the custom established in the earliest years of the history of the hospital, a gathering of the patients and others in the chapel, on the afternoon of every Sabbath, for the purpose of divine worship, has taken place. In conformity, also, with the course pursued from the beginning, the services have usually been conducted, in rotation, by the pastors of several denominational churches in the vicinity, but occasionally by those from a distance who were stopping temporarily in town. Inasmuch as the inmates of the hospital have themselves been connected, either by membership or attendance, with a diversity of church organizations, it is believed that this custom gives more general satisfaction than would be given by any one man acting as chaplain.

The average attendance upon these exercises during the official year was not far from two hundred and seventy.

All assemblies of the patients for purposes other than worship take place in the evening. Much the largest proportion of these are for entertainment and instruction by reading. The exercises on each of these occasions are opened and closed by vocal and instrumental music, the singing of hymns or, sometimes, of popular songs. In the selection of articles to be read there is an endeavor to cater to a diversity of tastes by making the variety of sub-

jects as large as possible without giving offence to any individual.

The other methods of entertainment and amusement which have been resorted to in the course of the year are shown in the subjoined schedule.

EXERCISES IN THE CHAPEL.

1.	On the Sabbath,				
	Divine worship,	•		53	days
2.	On Secular Evenings, —				
	(a) Readings and Recitations, opened and closed	with r	nus	ic :	
	The Bible			23	44
	The Bible and selections of prose,			2	**
	The Bible and selections of poetry, .			18	44
	The Bible and recitations of poetry, .			4	44
	Miscellaneous selections of prose, .			97	46
	Miscellaneous selections of poetry, .			35	,46
	Miscellaneous selections of prose and pe	oetry,		30	44
	Recitations of poetry,			4	44
	(b) Lecture:—				
	On agriculture,			1	••
	(c) Other entertainments:—				
	Pictures shown with the stereopticon, .			7	**
	Concerts of vocal and instrumental mus	ic, .		5	44
	Operetta, "The Rebellion of the Daisies	, .		1	**
	Broom drill, and " Ici on parle Français			1	"
	Exhibition of prestidigitation,	•		1	44
	(d) Social Assemblies: —				
	Quadrille parties,			19	16
	No assembly,	•		64	"
	Total,		٠	365	days.

By this list, it appears that the inmates were assembled upon three hundred and thirty-one days in the course of the year. This number is somewhat below the average in former years, in consequence of the omission of the evening exercise, on visiting days, during a part of the warmer months.

My opinion of the very great utility of this department of the administration of the hospital has been more and more confirmed by the experience of successive years.

FARM.

As the farm is not only one of the important means in the hygienic and restorative treatment of the patients, thus contributing to the great end for which the institution was established, but, furthermore, a no inconsiderable source of revenue in the production of articles necessary for the support of the inmates, it has always been considered worthy of a somewhat prominent place in the annual reports.

The remarkable and prolonged drought of 1882 was the cause of a great reduction in the quantity of farm and garden products for that year, and its influence was felt to some extent in the current year, more especially in the diminution of the quantity of hay, by the killing of grass-roots upon the drier portions of the farm. The summer just closed was characterized by another drought, less severe, and at a later date, but still to a pretty large extent diminishing the quantity of some of the crops the growth of which is chiefly in the latter part of summer.

Notwithstanding the injury to grass-roots above mentioned, the first crop of hay was larger by several tons than that of the next preceding year, and slightly the largest of any ever harvested upon the farm. The extent of land mown, however, exceeded that of any former year. The rowen, or after-growth, was seriously affected by the drought, yet the quantity cut was over 22 tons. This was nearly three times as much as was produced in 1882, but not so much by 16 tons as in 1881.

It was a favorable year for corn — of which the quantity raised is comparatively small — as well as for potatoes, which constitute one of our largest products. Over 2,500 bushels of the latter were harvested, or more than twice as many as in 1882.

Although this is not the "bearing year" for apples, and the prospect in the early part of summer was very unfavorable, still the harvest brought in no less than 191 barrels, which, under the circumstances, was an unexpectedly liberal yield.

Of onions the product exceeded that of any preceding year, and of beets it was larger than the average. Of squashes,

both winter and summer, it was small, as the vines were destroyed by worms at the roots. The yield of cucumbers was much diminished by the drought, and, for the same reason, the crop of English turnips was an almost utter failure.

LIST OF PRODUCTS.

TT (0) (1 01 0							A 2 00	-	^^
Hay (first growth of home far						•	. \$2,29		
Hay (south lot), 26 tons, at \$17	•			•		•		2	
Hay (Clarke orchard), 141 ton						•		1	
Hay (after-growth of whole fa	rm)	223	tons	at \$17	,	•		2	-
Corn fodder, dry, 16 tons,	•	•	•	•	•	•		4	
Oat straw, 5 tons,	•	•	•	•	•	•		0	
Corn, 225 bushels,	•	•	•	•	•	•		8	
Potatoes, 2,578 bushels, .	•		•	•	•	•	. 1,28		
•	•	•	•	•	•	•		2	
		•	•	•		• •		6	
Broom-brush, 700 pounds,		•				•	. 5	6	00
Carrots, 77½ bushels, .							. 8	0	82
Beets, 816 bushels,							. 28	5	75
Onions, 359 bushels,							. 27	5	25
Turnips, 582 bushels, .							. 23	2	80
							. 8	5	00
Beans (Lima), in shell, 116 bu	shel	3,					23	2	00
Beans (common), in shell, 28 h							. 2	8	00
•					. `			7	50
Beans (Lima), dry, 5 bushels,							. 1	5	00
Peas (green), in pod, 1161 bus								3	
Sweet corn (green), in ear, 216								6	
Tomatoes, 167 bushels, .			•					7	
								2	
~		:	•			:		Õ.	
Squashes (summer), 65 bushel			•		•			5	
Squashes (winter), 2 tons,	,		•	•	•	•		0	
30 10 1	•	•	•	•	•	•		4	
Melons, 465 pounds, Asparagus, 291 bushels,	•	•	•	•	•	•		8	
TO 1 . 001 1 1 1	•	•	•	•	•	•			
	•	•	•	•	•	•		7	
Beet greens, 15 bushels, .	•	•	•	•	•	•	-	5	
Spinach, 15 bushels,	•	•	•	•	•	•		5	
Radishes, 520 bunches, .	•	•	•	•	•	•			80
Cabbages, 1,500 heads,	•	•	•	•	•	•		0	
Currants, 25½ bushels, .	•	•	•	•	•	•			38
Apples, 191 barrels,	•	•	•	•	•	•			00
Pears, 30 bushels,	•	•	•	•	•	•	•	-	00
Quinces, 10 bushels,	•	•	•	•	•	•			00
Veal, raised here, 661 pounds,	•	•				•	. 8	30	04
								_	

Amount carried forward, .

. \$3,376 64

Amount brought for	ward	١, .				•	. :	\$,8,376	64
Pork, 15,612 pounds,			. •		•			1,403	47
Pigs sold, 126,				•				393	25
Pigs, roasting, 3, .								6	00
Turkeys, 140 pounds,								31	33
Chickens, 56 pounds,								11	35
Heads and plucks, .								4	5 0
Eggs, 1271 dozen, .								34	23
Milk (grass-fed), 20,304	l que	rts,						1,015	20
Cider, 8 barrels, .								24	00
Calfskins,				•				10	00
Young calves, sold, .						•		17	00
Wood, sold,								106	05
							_		

\$11,433 02

The aggregate valuation of the products exceeds by \$1,462.81 that of the next preceding year, when the crops were seriously affected by the drouth, and, with one exception, is the largest of any year since the foundation of the hospital. The exceptional year was 1881, when the valuation exceeded by \$143.26 that of the current year.

The vegetables which are consumed in the course of the summer are appraised at the current market rates, at the time they are brought from the garden or the field. It consequently follows that, not unfrequently, the price of any given product varies according to the fluctuations of the market. For this reason the total value in some of the items in the above list is not the result of a multiplication of the quantity of the products by any one price.

As the average number of the herd of cows is not less than thirty, the quantity of milk produced by them, as stated in the list, would, without explanation, appear to be too small. The 20,304 quarts is the quantity estimated to have been the product of the grass of pasturage. The whole quantity was four times as large, or 20,304 gallons. The value of the hay, grain, turnips, and other roots from which the estimated three-fourths was produced, is entered in the list; and to enter that portion of the milk at its proper valuation would be but a repetition of value.

The easiest and most profitable method of utilizing the large amount of offal from the kitchen of so large an establishment as this, especially if it be in the country, and has

an extensive farm, is in the production of pork. method has always been pursued here, and probably no other branch of the agricultural department of the institution, unless, perhaps, it be the production of milk, has been more profitable. Within the official year just closed, thirty-six swine were fattened and slaughtered on the premises. weights, in pounds, of their carcasses, were respectively as follows: 321, 338, 411, 319, 299, 434, 538, 382, 435, 380, 539, 390, 430, 375, 540, 450, 403, 645, 430, 410, 709, 645, 424, 364, 510, 435, 472, 465, 454, 404, 393, 338, 484, 443, 433, 170. The weight of the largest was 709 pounds, and that of the smallest 179 pounds. The average weight of the largest five of them was 615 pounds, of the largest ten 554 pounds, and of the whole, 433 pounds. Their aggregate weight was 15,612 pounds, a quantity which has in no former year been exceeded. It furnished the hospital with a year's supply of salt pork, lard, and ham, and left a surplus of 925 pounds of pork and 150 pounds of ham, which was sold. Besides this, 126 pigs were sold, for an aggregate sum of \$393.25.

At the close of the official year the farm stock consisted of 9 horses, 6 working oxen, 6 fat oxen, 1 bull, 34 cows, 3 calves, 135 swine, 1 goat, and a pretty large number of domestic fowls.

How the Hospital is Supported.

The following financial exposition is the same that was published in the annual report for 1881-82, with the exception of changes necessary for its adaptation to present circumstances.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the funeral expenses of State patients who die in the hospital, and whose remains are not removed for burial. The receipts from the last-mentioned source during the past year were forty dollars.

For the entire support of State patients, including clothing and all loss from breakage and other kinds of destruction,

the hospital received \$3.50 each per week from the treasury of the Commonwealth, from April 1, 1870, to April 1, 1879. For one year after the latter date it received but \$3 each per week; and since April 1, 1880, it has received \$3.25 each per week. This is the compensation fixed by statute law. One hundred and fifty-eight, or almost precisely one-third of the inmates now belong to this class. During the past year the weekly average of them was 34 per cent. of the whole.

For town patients it has received, and now receives, from the treasuries of the towns respectively in which these patients have legal settlements, the same sum per week (\$3.25 each) as from the State treasury for State patients; but the towns clothe their patients, and remunerate the hospital for damages done by them. More than one-half of the inmates are now in this class. The weekly average of them for the year was 53 per cent.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1883, was \$5.06 each per week. Clothing and damages are extra charges. The weekly average of these patients during the past year was a fraction over 12 per cent., or about one-eighth of the whole.

The average weekly pay, per capita, charged by the hospital for all its patients—State, town, and private—in the course of the year is \$3.474. Such are the pecuniary resources of the institution. We turn to the results of

THE FINANCE OF THE LAST EIGHTEEN YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its tavor. Between that time and the 1st of June, 1867, it received a direct bonus from the State of \$5,000, in two appropriations, for specific purposes,—one of \$2,000 and the other of \$3,000.

As an offset to the \$5,000 bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and fifty acres, together with four dwelling-houses, the total cost of which was \$30,183. The State then has, in this way alone, been overpaid for its bonus, in the sum of \$25,183.

The amount paid by the hospital for repairs and improvements in the course of the eighteen years, from Sept. 30, 1865, to Sept. 30, 1883, is \$205,925.89.

The surplus of cash assets now on hand, including the reserve fund, is \$32,401.11, or \$32,099.07 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing, now on hand, are estimated to have cost \$16,618.94. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$14,118.94.

The value of household furniture in the hospital is, at a low estimate, at least \$10,000 greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called \$8,000. Collecting these several sums the account of debt of the Commonwealth to the hospital appears to be as follows:—

Excess of c	l improven	oen ts ,				•			205,925	89
Excess of p	resent cas	h asse	ts,						32,099	07
Increase of	provisions	and a	supp	olies,					14,118	94
Increase of	furniture,	•	•	•		•	•	•	8,000	00
Total,									\$285,326	90

The necessary current repairs of the buildings may be estimated at \$3,000 annually. Deducting this sum for each of the eighteen years since Sept. 30, 1865, a total of \$54,000, there is a remainder of \$231,326.90. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

In connection with the above exposition, it may be interesting to know to what extent the tax-payers of the State have contributed to the institution. From a list, furnished by the State treasurer, of all the appropriations made either for the construction, the repairs, or the improvements of the hospital, I find that, from the time of the passage of the

act authorizing its erection down to the present day, it has cost the people of the Commonwealth only three hundred and seventy-five thousand five hundred and fifty dollars (\$375,550).

ACKNOWLEDGMENTS.

As the lapse of each successive year calls for the preparation of the annual report, it is always an agreeable duty not only to recognize and acknowledge the assistance of persons not connected with the hospital, in giving instruction, entertainment or amusement to our inmates, but to render our warmest thanks for every contribution to those purposes.

We are indebted, this year, to Miss Florence Austin, for a large collection of magazines and newspapers, as well as for numerous new-year's presents to inmates of the women's department; to Mrs. J. H. Butler for a collection of magazines; to S. E. Bridgeman, Esq., for a large number of religious newspapers, to Dr. G. W. Crittenden for a lot of the "Franklin Square Library"; and the publishers of the "Christian Register," and of the "Staaten Zeitung," for one copy, weekly, of each of those papers, respectively.

We are also under obligations to George W. Horr, Esq., for a lecture; to Dr. T. W. Meekins for exhibitions with the stereopticon; to Miss Longley and Miss Rice for two concerts; to several students of Smith College for a concert, with readings, under the direction of Miss Machado; and to Miss Blodgett and her amateur company for two entertainments, one of them an operetta, "The Rebellion of the Daisies," and the other a Broom Drill, and the comedy "Ici on parle Français."

The medical staff of the hospital remains the same as at the beginning of the official year. To the physicians thus associated with me, as well as to all the other present officers of the institution, my acknowledgments are due for the continued faithfulness with which they have performed the diversified labors of their departments.

The annual report now presented to you, gentlemen of the Board, is the twentieth which I have had the privilege and the pleasure of preparing and laying before your honorable

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34 LUNATIC HOSPITAL, NORTHAMPTON. [Oct.'83.

body,—the first of them having been written but three months after my appointment to the office of superintendent. The term of service thus implied is, if I mistake not, longer by several years than that of any other physician who has ever held the office of superintendent of a hospital of the kind belonging to this Commonwealth. Throughout this almost completed score of years, your counsel and confidence have been my aid and support, and it will ever be one of the pleasantest and most cherished memories of my life, that the perfect harmony of our official relations has never for an instant been broken.

PLINY EARLE.

NORTHAMPTON, Oct. 4, 1888.

APPENDIX.

2. Monthly Admissions, Discharges and Averages.

Months.	AD	MISSION	8.	1	DISCHARGES DAILY PATIENTS			Y AVERAG	
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
1869.									
October	8	4	7	4	5	9	228.71	229.67	458.38
November, .	6	4	10	4	8	12	228.60	226.76	455.36
December, .	9	5	14	5	3	8	231.22	225.58	456.80
1883.									
January, .	10	2	12	1	4	5	237.70	226.32	464.09
February, .	3	3	6	5	4	· 9	242.00	223.21	465.21
March,	5	8	13	11	8	14	236.35	226.81	463.16
April,	4 7	8	7	5	7	12	236.23	227.43	463.66
May,		13	20	5	8	13	233.87	226.19	460.06
June,	11	12	23	4		7	242.13	236.57	478.70
July,	6	6	12	12	4	16		239.65	
August,	6	6	12	7	2	9		242.16	
September, .	8	3	11	14	9	23	234.83	243.47	478.30
Total of cases, Total of per-	78	69	147	77	60	137	-	-	_
sons,	77	65	142	77	60	137	_	_	_
Daily average							005.53	001.10	100 70
for the year,	-	-	_	-	-	-	235.57	231.19	466.761

3. Received on First and Subsequent Admissions.

NUMBER O	P ADM	r r q q r	ON	CAS	es Admiti	PED.	Times Previously Recovered.			
MUMBER O		LL ADA	11501	ر. ر	Males.	Females.	Total.	Males.	Females.	Total.
First, .	•		•		65	52	117	_	_	_
Second,.					11	11	· 22	_	5	5
Third, .					1	2	8	_	- 1	_
Fourth					_	2	2	-	8	3
Fifth, .					_	2	2	<u> </u>	-	-
Tenth, .	•	•	•	.]	1	-	1	4	-	4
Total o	f ca	s es,			78	69	147	4	8	12
Total o	f pe	rsons,			77	65	142	1	6	7

^{*} For Table No. 1, see the beginning of the Superintendent's report.

[†] These totals were obtained by a division of the sums of daily residence for the year by 365, the number of days in the year.

4. Ages of Persons Admitted for the First Time.

AGES.		AT I	IBST ATT		WHEN ADMITTED.			
AGES.		Males.	Females.	Total.	Males.	Females.	Total.	
Congenital,		1	_	1	_	-	-	
Fifteen years and less, .	•	2 2 5 2 7 7 9 4 4	8 2 8 4 7 5 7 1 2	5	-	1	1	
From 15 to 20 years, .	•	2	2	4	2 5 7	3 7	5	
20 to 25 years, .	•	5	8	13	5	7	12	
25 to 30 years, .		2	4	6		7 7	14	
30 to 35 years, .		7	7	14	9	7	16	
85 to 40 years, .		7	5	12	15	7	22	
40 to 50 years, .		9	7	16	12	11	23	
50 to 60 years, .		1 4	1 1		7	4	11	
60 to 70 years, .		l ā	9	5 6 2	5	3	8	
70 to 80 years, .	:	ī	ı î l	š	5 3	1 1	ĭ	
Over 80 years,	•		;	1		;	1	
Traba ama		21	1 1	32	_	1 1		
Unknown,	•	21	11	oz	-	-		
Total of persons, .		65	52	117	65	52	117	

5. Parentage of Persons Admitted.

PLACES OF N.	A 1717	שייוש		MA	LRS.	FEM	ALES.	TOTALS.		
TERCES OF R.		VIII.		Father.	Mother.	Father.	Mother.	Father.	Mother	
Maine,				1	1	_	_	1	1	
New Hampshire,				2	1	_	_	2	1	
Vermont, .				6	6	1	1	7	7	
Massachusetts,				20	22	10	12	30	84	
Connecticut,				5	5	2	1	7	6 8	
New York, .				4	1	1	2	5	8	
Maryland, .				1	1	_	_	1	1	
Virginia				_	-	1	-	1	-	
Michigan, .				-	_	1	-	1	-	
Canada, .				4	4	3	2	7	6	
New Brunswick,				1	1 1	_	_	1	1	
England,				1	2	2	1	3	8	
Ireland, .				25	25	30	30	55	55	
Scotland, .				1	1	2	2	3	8	
Wales,				-	-	1	2	1	3 2	
Nassau, .				_	-	1	ī	1	1	
Germany,			•	4	4	2	2	6	6	
Unknown, .	•	•	•	2	8	8	9	10	·12	
				77	77	65	65	142	142	

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6. Residence of Persons Admitted.

PLA	CES				Males.	Females.	Total.
Massachusetts. —							
Hampshire County,					16	9	25
Hampden County,					31	26	57
Berkshire County,					15	16	81
Franklin County,					14	8	22
Worcester County,					1	l il	2
Norfolk County,					_	1	ī
Suffolk County,					_	2	2
Middlesex County,					_	1	1
		•	•		_	1	ī
Total of persons,		•			77	65	142
Cities or large towns,*					41	32	78
		•		•	36	33	69
Total of persons,		•			77	65	142

7. Civil Condition of Persons Admitted.

NUMB:	er o	F	U	IMARRI	ED.	Y	[ARRIE	ъ.	W	IDOWE	D.	Dr	VORC	ED.
THE ADI	(1881	ON.	Ma.	Fe.	ToŁ	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First,			26	18	44	32	22	54	7	11	18	_	1	1
Second,	•	•	4	1	5	6	6	12	-	1	1	-	-	-
Third,	•	•	-	-	_	1	2	8	-	-	-	-	-	-
Fourth,	•	•	-	1	1	-	1	1	_	-	_	-	-	-
Fifth,	•	•	-	-	-	-	1	1	! -	-	-		-	-
Tenth,		•	1	-	1	-	_	-	-	-	-	-	-	-
Total p	er80	ns,	31	20	51	39	32	71	7	12	19	-	1	1

^{*} Containing not less than 10,000 inhabitants.

8. Occupations of Persons admitted.

OCCUPATIONS.	Males.	OCCUPATIONS.	Females
Clergyman, Physician, Manufacturer, Book-keeper, Salesman, Insurance agent, Musician, Printer, Farmer, Machinist, Builder, Carpenter, Bricklayer, Blacksmith, Hotel-keeper, Butler, Jeweller, Bartender, Tailor, Hatter, Moulder, Railroad fireman, Tool-maker, Spinner, Laborer, Farm-laborer, Carriage-trimmer, Cigar-maker, Button-maker, Button-maker, Button-maker, Gate-keeper, Peddler, None,	1 1 2 1 1 1 1 1 2 3 2 1 1 1 1 1 1 1 1 1	Teacher,	Females 1

9. Reported Duration of Insanity before Last Admission.

PREVIOUS DURATION.	1	T ADMI			LL OTE		Totals.			
THE VICTOR DOMESTICAL	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	
Congenital,	1	_	1	-	_	-	1	-	1	
Under 1 month, .	5	6	11	-	1	1	5	7	12	
From 1 to 3 months,	15	10	25	-	2	2	15	12	27	
3 to 6 months,	6	5	11	-	1	1	6	6	12	
6 to 12 months,	8	3	11	1	3	4	9	6	15	
1 to 2 years, .	5	10	15	2 5	1	8	7	11	18	
2 to 5 years, .	3	9	12	5	3	8	8	12	20	
5 to 10 years, .	2	1	3 3	-	4	4	2	5	7	
10 to 20 years, .	2	1	3	1	1	2	8	2	5	
Over 20 years,	_	-	-	1	-	1	1	_	1	
Unknown,	18	7	25	3	1	4	21	8	29	
Total of cases, .	65	52	117	13	17	30	78	69	147	
Total of persons,	65	52	117	13	16	29	77	65	142	
Av'ge of known cases,	1 4 0 yr	1 4 6 yr	1 <u>67</u> yr	7 } yr	9 7 g yr	8 18 yr	2 8 8 51	3 ‡	3 } \$ yı	

10. Form of Disease in the Cases Admitted.

FORM OF	DISE	CASE.				Males.	Females.	Total.
Mania,						45	39	84
paretic		•		•			i - I	3
		•			.	3 3	_	3
Melancholia,						16	20	36
Dementia,						9	7	16
senile, .						1	-	1
epileptic,						_	1 1	1
Not insane,	•	•	•	•		1	2	3
Total of cases,						78	69	147
Total of persons,		•		·		77	65	142

^{*} In this division of the table the whole period of time, from the first attack to the last admission, is indicated. One patient is repeated, she being twice a readmission, and four are included who are in the first division, they having been admitted for the first and second times within the year.

11. Probable Causes of Insanity in Persons Admitted.

	CAU	SES.					Males.	Females.	Total.
	Phy	sica	 I.						
Congenital, .			•		•		1	-	1
Ill-health, .	•	•	•	•	•	•	1	12	13
Intemperance,	•	•	•	•	•	•	9	4	13
Overwork, .	•	•	•	•	•	•	8	5	8
Epilepsy, .	•	•	•	•	•	•	4	-	4
Sunstroke, .	•	•	•	•			2	- 1	2
Masturbation,							5	1	6
Injury of head,							4	-	4
Injury,						.	8	1	4
Malaria, .							1	1	2
Syphilis, .						.	1	-	1
Scarlet fever,							_	1	1
Exhaustion, .						.	_	1 .	1
Puerperal, .							_	1	1
Change of life,						.	_	7	7
Old age, .						.	-	1	1
Opium eating,	•					.	-	1	1
Total of phy	sical,	, .			•		84	36	70
	Mes	ntal							
Pecuniary trouble							4	_	4
Loss of property			•		-	.	ī		1
Disappointment,	•	•	•	·	•		ī	_	ī
Domestic trouble		:	•	•	•		ī	2	3
Trouble.	, .	•	•	•	•		_	3	3
Loss of child.	•	•	•	•	•		_	i	ĭ
Loss of friends.	•	•	•	•	•			i	î
a	•	•	•	•	•	•		i	i
Grief, Hard study, .	•	•	•	•	•	•		i	î
nara study, .	•	•	•	•	•			1	
Total of men							7	9	16
Total of phy		, .				.	84	36	70
Not insane, .						.	1	2	3
Unknown, .			•				35	18	53
Total of pers	000						77	65	142

12. Relation to Hospitals of the Persons Admitted.

	Males.	Females.	Total.
Never before in any hospital,	57	45	102
Former inmates of this hospital	10	12	22
State,	2	7	9
hospitals in this State,	-	-	-
Former inmates of hospitals in other States, Former inmates of this hospital and of hos-	4	-	4
pitals in other States,	1	1	2
other States,	•	-	-
hospital, Former inmates of foreign hospitals: Can-	1	-	1
ada; Madras, India,	2		2
Total of persons,	77	65	142

13. Discharges Classified by Admission and Results.

. '			
	Totals.	2112868411	88
TOTALS.	Females.	4-88811	59
	Males.	68	76
	,afato !	24 0	0g 1
DIED.	Females.	∞41-111	13
	Males.	16	17
ED.	Totals.	8811441	怒 ₁
URIMPROVED.	Females.	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14
Uni	Males.	80111111	21
ė	Totals.	22 11 22 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	ಜ္ಞ ၊
IMPROVED.	Pemales.	<u> </u>	15
A	Males.	11 1 1 1 1 1	8 1
VED.	Totals.	∞ 	တ၊
MUCH IMPROVED.	Females.	111111	1.1
Mace	Males.	80	6 1
ġ	.slatoT	11 - 1 - 1 - 23	بر ا
BECOVERED.	Females.	13	121
BE	Males.	0111111	= '
		• • • • • •	• •
		• • • • • •	• •
		• • • • • • •	
	SION.	• • • • • •	
	ADMIR	• • • • • • •	Total of <i>cases</i> , Total of <i>person</i>
		• • • • • •	9
		First, . Second, Third, . Fourth, Fifth, . Sixth, . Tenth, .	Total Total

One woman and one man were discharged as not insane, making the total of cases 137.

14	ł. .	$oldsymbol{How}$	Supported.
----	-------------	------------------	------------

SUPPORTED AS		PATI	ents Admi	TTED.	AVER	AGE OF T	IR YEAR.
,	 	Males.	Females.	Total.	Males.	Females.	Total.
State patients, .		27	14	41	87.34	74.28	161.62
Town patients, .		38	40	78	118.98	128.65	247.63
Private patients,		13	15	28	29.26	28.32	57.58
Total of cases,		78	69	147	_	-	466.83

15. Cases Discharged Recovered. — Duration.

PERIOD.		TION B			OSPITA ISIDEN			LE DUR	
	Ma,	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Under 1 month,	1	8	4	2	_	2	-	_	_
From 1 to 8 months, .	3	10	13	5	4	9	2	2	4
3 to 6 months, .	1	1	2	2	5	7	2	4	6
6 to 12 months, .	2	-	2	2	4	6	1	5	6
1 to 2 years,	-	1	1	-	2	2	2	2	4
2 to 5 years,	-	-	-	-	1	1	-	2	2
5 to 10 years,	-	-	-	-	1	1	_	-	-
10 to 20 years,	-	1	1	_	-	-	-	1	1
Over 20 years,	-	-	-	-	-	-	-	-	-
Unknown,	4	1	5	-	_	_	4	1	5
Total of cases,	11	17	28	11	17	28	11	17	28
Total of persons,	11	17	28	11	17	28	11	17	28
Average of known cases (in months),	49	13 4	10 1 5	8	12 17	85	8	20-₹₹	16 <u>1</u> 8

^{*} This, the weekly average, is larger by $\frac{7}{100}$ than the daily average, which is 466.76.

16. Cases Resulting in Death. - Duration.

PERIOD.	1	TION B			OSPITA SIDENC	_		OLE DUR	
	Ma.	Fe.	Tot.	Ma,	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital,	- 4 1 3 1 1 2 1	- 1 3 1 3 2 - 1 - 2	- 1444631313	1 2 1 1 2 1 8 2 4	1 1 1 4 4 2	1 3 2 1 3 5 7 4	- - 1 2 3 2 - 1 7	1 - 4 2 3 1 2	- - 1 3 6 2 4 8 3
Total,	17 62 11	18 29 <u>1</u>	30 49	17 109] \$	13 69 11	30 92 1 4	17 169 18	13 100 } {	30 141 <u>17</u>

17. Cases Discharged by Recovery or Death.

Tr.	DM (NP 796	BANIT	•			RE	COVER	LES.	1	PATE	.
		<i>y</i> 113		••			Ma,	Fe.	Tot	Ma.	Fo.	Tot.
Mania, .						•	10	11	21	10	10	20
paretic		•	•	•	•		-	-	-	3	-	3 2
epilepti	c,	•	•	•	•	•	-	-	-	1 1	1	2
Mania à potu,			•	•	•		1	-	1	-	-	-
Melancholia,	•						-	6	6	-	2	2
Dementia, .							-	-	-	2	-	2
seni	le,	•	•	•	•	•	-	-	-	1	-	1
Total of ca	368						11	17	28	17	13	30
Total of pe		ıs,	•	•	•	•	11	17	28	17	13	30

18. Causes of Death.

CAUSES.	Males.	Females.	Total.
Nervous System. — Epilepsy,	1	1	2
Apoplexy,	2 3	_ :	2 2 3
Paresis	3	_	3
Paresis,			
nia, Exhaustion of chronic	1	-	1
mania,	8	. 2	5
Circulatory Fatty degeneration of the	_	-	
heart,	1	_	1
Respiratory. — Phthisis,	8	6	9
Digestive. — Enteritis,	1	1	2
Enteritis of peritoneum,	1]	ī
Company to Company to the company	_	1	i
	1	2	
General. — Old age,	1	, z	ð
Totals,	17	13	30

19. Deaths, Classified by Results of Previous Admissions.

NUMBER OF THE	Rec	OOVE	EED.		MUCE		In	PROV	ED.	Uni	MPRO	VED.	7	[OTA]	L.
ADMISSION.	Ma.	Fe.	Tot	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First,	_	4	4	-	1	1	_	-	_	1	_	1	1	5	6
Second,	-	1	1	-	-	-	-	-	-	-	-	-	-	1	1
Third,	-	_	-	-	-	-	-	1	1	-	-	-	-	1	1
Total of cases,	-	5	5	-	1	1	-	1	1	1	-	1	1	7	8*

^{*} These eight cases represent but six persons, one of the persons having had three former admissions, and consequently three results.

20. Recoveries, Classified by Results of Previous Admissions.*

NUMBER OF THE	RE	COVE	RED.		MUCI PROV	-	Imi	PROVI	ED.	Unii	MPRO	VED.	7	[ATO]	Ŀ.
ADMISSION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Second,	1	1	2	-	_	-	-	-	-	-	-	-	1	1	2
Third,	-	1	1	-	1	1	-	-	_	-	-	-	-	2	2
Fifth,	-	1	1	-	-	-	-	-	-	-	-	-	_	1	1
Total, .	1	3	4	-	1	1	-	-	-	-	-	-	1	4	5

21. Deaths, Classified by Duration of Insanity and of Treatment.

******		TON OF INS		11	Known P.			
PERIOD.			Males.	Females.	Total	Males.	Females.	Total.
Congenital,			-	_	_	_	_	_
Under 1 month, .			_	_	-	-	-	_
From 1 to 3 months,			1	-	1	2 2	1	3
3 to 6 months,			1	i -	1	2	1	3
6 to 12 months,			1 3 2	1	1 2 3 5 1 8	_	1	1
1 to 2 years.			3		3	2	_	2
1 to 2 years, 2 to 5 years,			2	3	5	1	4	5
5 to 10 years.			_	1	ì	3	ī	4
5 to 10 years, 10 to 20 years,			1	2	3	3 3	5	Ř
Over 20 years, .			7	3	10	4	_	8 4
Unknown,			i	3 1 2 3 8	4	_	-	_
Totals,			17	13	30	17	13	30
Average of known cas	es	(in	1					
months),		` .	1697	150₽	162 6	115,7	8314	1011

^{*} In all cases of more than one admission, this classification is based upon the result of the admission next preceding the last, in each case respectively.

22. Ages of those who Died.

AGES.		AT TIME	OF FIRST	ATTACK.	AT 1	IME OF DE	ATH.
Č		Males.	Females.	Total.	Males.	Females.	Total.
Fifteen years and less, .		2	-	2	_	_	_
From 15 to 20 years, .		1	1 1	2 2 4 2 6 5	_	1	1
20 to 25 years, .		_	1 2 3	2	_	-	_
25 to 30 years, .	.	1	3	4	-	1	1
30 to 35 years, .	. 1	2	-	2	1	2 2 2 1	3
35 to 40 years, .	.	2 5 8 1	1 1	6	1 3 6	2	5
40 to 50 years, .	.	8	1 2 1 1 1	5	6	2	8
50 to 60 years, .	.	1	1 1	2	1	1	2
60 to 70 years, .	.	_	_	_	5	2	7
70 to 80 years, .	. 1	_	1 1	1	1	2	1 3 5 8 2 7 3
Over 80 years,	.	_	_	_	_	-	_
Unknown,	•	2	2	4	-	-	_
Totals,		17	13	30	17	13	30

Annual Admissions since the Opening of the Bospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1883. **33**

	Арміттер.	ė į		RECOVERED.		MUCH	EW CASES (FI) Disc MUCH IMPROVED.	(First Admissions). Discharged and Dird in 1888-83. IMPROVED.	NEW CASES (First Admissions). Discharged and Dis	IRD IN 186	# # # # # # # # # # # # # # # # # # #	UNIN	UMIMPROVED.		DIKD.	
Males.	Females.	Total.	Males.	Females.	.latoT	Males.	Females.	.latoT	Males.	Pemales.	Total.	Males.	Females.	Tolel.	Males. Females.	Total.
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0.71111111	13
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155 128 126 110 55 83 97 97 102	8,208
69 63 63 55 54 47 49 62 62 62	1,605
86 63 55 49 50 50 65	1,598
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•	
1878-74, 1874-76, 1875-76, 1876-77, 1877-78, 1878-79, 1878-80, 1880-81, 1881-82,	Totals,

One man and one woman discharged as not insane, are not included in this table.

23. Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1883 — Concluded.

						æ	RE-ADMITTED CASES.	IITTE.	D CAS	ES.										
					-			Die	CHA RG	ED AND	DISCHARGED AND DIED IN 1888-83.	IN 118883	.83					REMAIN	TNG OF E ISSIONS,	ACH TRAR'S SEPT. 30,
YEARS.		ADMITTED.		RKC	RECOVERED.		MUCH IMPROVED.	(PROVI		IMPR	IMPROVED.	<u> </u>	UNIMPROVED	OVED.		DIED.		8		
	Males.	Females.	.latoT	Males.	Females.	Total.	Males.	Females.	LatoT	Males.	Females. Total,	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	' datoT
1858, 2 months.	-	1	ı	ı	1	ı	1		ı			1			1	'	•	11	5	16
1858-59.	4	_	40	1	<u> </u>	1	,	1	1	<u> </u>	<u>'</u> 1	- - 1	-	1	<u> </u>	1		2	_	ဘ
1859-60.	2	တ	2	ı	1	1		1	1	-	<u>'</u>	- -		<u> </u>	<u> </u>	1	1	9	2	2
1860-61,	13	_	20	ı	1	1	1	1	1	_	<u>'</u>	- -	·	<u>'</u>	<u> </u>		1	8	_	4
1861-62,	13		18	1	1	1	1	ı	•	1	<u> </u>	<u> </u>	<u> </u>	_	-	,	١	-		87
1862-63,	14		52	1	1	1	1	1	-	<u> </u>	<u> </u>	1	<u>'</u>	<u> </u>	1	1	1	_	4	2
1863-64,	12		27	1	1	ı	1	-	1		<u>.</u>	<u>'</u>	<u> </u>	-	-		ı	_	_	84
1864-65,	16		25	1	ı	1	ı	1	1	_	<u>'</u>	<u> </u>		<u> </u>	-	1	ı	4		2
1865-66,	6		18	1	1	1	1	1	1	<u> </u>	<u>'</u>	<u>'</u>	<u> </u>	 -	1	1	1	5	_	9
1866-67,	19	∞	27	1	1	1		1		· •	<u>.</u>	<u> </u>		_	1	1	,	7	S	2
1867-68,	14		22	ı	,	1	1	-	1	1	<u>'</u>	 -	<u> </u>	1	-	1	ı	တ	4	~
1868-69	12		88	1	ı	1	1	1	1	1	<u>'</u>	1	·	<u> </u>	_	1	1	2	2	12
1869-70,	10		19	١	1	-	1	1	1	-	<u>'</u>	' 	 -	<u> </u>	-	1	1	4	2	6
1870–71,	16		8	1	,	1	1	1	1	· ·	<u>'</u>	<u> </u>	 -	 	1	1	١	=	Π	22
1871-72,	28		31	1	1	ı	1	1	_	· 1	<u>'</u>	<u> </u>	۱ 			1	,	!	10	17
1879_78	18		6						_	_	_	_	_		_					

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19	16	14	91	12	G	10	17	10	17	288
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1878-74,	1874-75,	875-76,	876-77,	1877-78,	1878-79,	879-80	1880-81	1881-82	(882–83,	Totals,

24. Relapsed Cases admitted in each year, and discharged in 1882-83.

Discardes.				CASES LECTIONSEI RECOVERED IN THIS HOSFILLAD.	AL.				_		
Se Malces Malce		DISCHARGED	AND DIR	18 NI di	88-83.				RE	REMAINING BEPT. 30, 1883.	rr. 30, 188
Total: Total:			IMPROVED.	ė	UNIMPROVED.	OVED.		DIED.	<u> </u>		
11	Total.		Females.	Total.	Males. Females.	.fatoT	Males.	Females.	Total.	Males. Females.	Total.
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25. Classed Average of Patients.

OFFICI	AL	YEAR.		State Patients.	Town Patients.	Private Patients.	Total
Monthly	A	v erag	ε.				
1864–65,				225.10	48.16	69.83	343.25
1865–66,		•	•	252.16	50.58	75.58	378.33
Weekly	A	erage					
1866-67,				261.96	49.46	89.75	401.17
1867-68,				262.65	47.92	103.06	413.6
1868-69,				248.52	54.98	101.46	404.9
1869-70,				236.19	65.04	107.23	408.4
1870-71,				234.10	77.07	118.38	429.5
1871-72,				226.96	89.57	112.27	428.8
1872-73,				248.02	99.23	90.00	437.2
1873-74,				284.48	102.88	82.06	469.4
1874-75,				274.35	128.34	72.46	475.1
1875-76,				259.19	146.02	68.94	474.1
1876–77,				254.84	161.58	60.02	476.4
1877-78,				211.90	175.71	54.75	442.3
1878-79,				200.34	182.29	54.23	436.8
1879-80,				197.03	198.01	55.46	450.5
1880-81,				180.82	214.15	57.19	452.1
1881-82,				166.84	238.25	56.52	461.6
1882-83,				161.62	247.63	57.58	466.8

26. Monthly Consumption of Gas.

		мох	NTHS.				Cubic Feet.	Daily Average
		10	582.					
October.						.	34,950	1,127.42
November,						.	41,450	1,381.66
December,			•			.	48,400	1,561.29
		14	888.			-		
January,						. 1	46,500	1,500.00
February,					·		86,500	1,303.57
March, .						.	30,950	998.38
April, .						.	23,450	781.66
May, .						.	16,450	530.64
June, .						.	12,450	415.00
July, .							14,000	451.61
August, .							16,200	522.98
September,	•	•	•	•	•		26,000	866.66
Totals,							347,300	951.50

[•] Daily average for the year.

27. Supplies for the Several Departments for the Year 1882–83.

	Men's Department Upper las Hall, 2d Hall, 3d and 4th Hall Middle las Hall, 2d Hall, 1st Hall Lower las Hall, 3d and 4th Hall 3d and 4th Hall	Women's Departmen Upper 1st Hall, 2d Hall, 3d Hall, 4th Hall, 2d Hall, 3d Hall, 4th Hall, Lower 1st Hall, 3d Hall, 4th Hall, Lower 1st Hall, 3d Hall, 3d Hall, 3d Hall, 3d Hall, 3d Hall, Ritchen, Rear,	Aggregate,
		*	•
Sheets.	22882823	2555624 1 4 8 8 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4	475
Pillow-cases.	82222234 62222322	24455851 - 4451 - 188	96
Bed spreads.	19041111	1111661651161	88
Blankets.	81 185082	11112119498121	162
Rabber Speets.	1-8-8818-	111100404601111	39
Bed-ticks.	17800561	12116811828111	110
Pillow-ticks.	1 1 0 1 0 0 1 0 1 1 1 1	111111111111111111111111111111111111111	45 403
Towers.	112 10 10 10 10 10 10 10 10 10 10 10 10 10	2018004831014	3 61
Wash -bowls.		22 122 1122 122 122	2
Ewers.		8-11-111111111	4
(;hambers.	285.86	9777 977 977 977 977 977 977 977 977 97	283
Mirrors.	110110110	1-111111-1	6
Hair Brushes.	9-11-11-1-1	11111001111110	12
Comps.	166-64-68	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	136
('arpet Strips.	160 160 60 144 11	101147411011101	3
Plates.	24. 6 6 12. 12.	9 - 21 - 121 - 132 - 130 - 1	330
Cups.	2188 8 21 1 1 8 1 1 1 1 1 1 1 1 1 1 1 1		¥ 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Saucers.		12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	98
Tumblers.	888 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1880120112111811	83
Mugs.	118188111	11 1 6 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1	105
Pitchers,	841119188	11010011101-001	8
Syrup Cups.	111-6111-		7
Knives.	1 1 00 1 00 1 1 1 1	E 1 E 10 10 2	3
Forks.	118160111	11110011100111111	ន
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Supplies for the Several Departments for the Year 1882-83 Concluded	Soap, pounds.	1	25	೫	8	8	7	8	8	
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28. Days' Work by Patients.

MONTHS.		FARM.	 	Кітспви		Sewing- Room.		Laundry	
		Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total.
1882. October		642	124	242	366	123	50	361	411
October,	•	042	124	242	300	123	90	991	411
November,	•	613	120	233	353	145	45	374	419
December,		576	124	243	367	140	52	374	426
188 3. January,		550	124	242	366	138	54	873	427
February,		448	112	225	337	109	48	328	376
March, .		477	124	281	855	154	54	366	420
April, .		698	120	236	356	125	50	842	892
Мау, .		869	124	241	365	185	54	870	424
June, .		1,081	120	236	356	144	52	339	391
July, .		1,196	124	253	377	158	52	372	424
August, .		1,024	124	251	375	150	54	391	445
September,		1,039	120	240	360	136	50	319	369
Totals,		9,213	1,460	2,873	4,333	1,707	615	4,309	4,924

The patients whose work is recorded in this table, were employed as many hours in the day as were the employes in each of the several departments respectively. The total number of days' work is 20,177, to which may be added 1,081 days by men, in the mattress room, making an aggregate of 21,258 days. The number is larger, by more than two thousand, than in any preceding year. No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler room, and the carpenter's shop. A large amount of other work is done, both in the halls, and, at irregular times, out of them.

29. List of Articles made in the Sewing-room.

Dresses,		•	•	271	Pillow-cases,		•		420
Chemises, .				121	Bolster-cases,		•		31
Drawers, .				74	Mattress-ticks,				127
Skirts, .			•	124	Feather-ticks,			•	32
Sacques, .			•	8	Pillow-ticks,				40
Night-dresses,				11	Bed-spreads he	mm	ed,		63
Hats trimmed,				6 0	Curtains, .				54
Shirts,	,		•	426	Table-cloths,				17
Shirts, duck,			•	6	Dish towels,				450
Suspenders, pair	s,			224	Roller towels,				115
Collars, .				256	Carpets made,				12
Aprons, .				201	Clothes-bags,				10
Camisoles, .				10	Bureau spreads	,			37
Handkerchiefs,				5	Cushions, .				4
Sheets, .				521	Articles repaire	d,			18,825

30. Upholstery done in the Year.

Hair mattresses made, new materials, .						52
Hair mattresses made, new ticks,						39
Hair mattresses made, old ticks, new hair,	•					12
Hair mattresses overhauled, hair repicked,						19
Husk mattresses made, new materials, .				•		15
Husk mattresses made, new ticks, old husks,	,					11
New husk underbeds made, new materials,						13
Old underbed ticks filled with new husks,						104
Hair pillows made, new materials,						20
Hair pillows overhauled, hair repicked, .						23
Sixty-five feather beds, bought before the	hosp	ital	was	open	ed,	were
overhauled, the feathers cleansed by steam	n off	the	prei	mises	, and	the
beds remade, forty-one of them with new	tick	s ma	ide h	ere.		

31. Annual Cost of Gas.

	YEAR.					Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860–61, .	•			•	•	\$2,030 39	314.26	\$ 6 46
1861–62, .		•		•		2,085 29	313.80	6 64
1862–63, .					•	2,109 02	355.63	5 93
1863-64, .		•	•	•		2,069 79	357.63	5 78
1864–65, .					•	1,653 05	842.40	4 8
1865–66, .						1,107 98	376.35	2 9
1866-67, .	•	•			•	1,056 16	401.03	2 6
1867–68, .	•				•	1,022 51	413.41	2 4
1868-69, .		•				903 92	405.10	2 2
1869–70, .		•				915 30	408.83	2 2
1870-71, .	•				•	1,048 99	421.90	2 4
1871-72, .						980 94	428.72	2 2
1872–73, .						1,006 61	437.23	2 3
1873-74, .	•					1,066 74	469.54	2 2
1874–75, .		•		•		1,012 63	475.35	2 1
1875–76, .						1,089 82	474.21	2 2
1876-77, .		•				1,033 59	476.16	2 1
1877-78, .						1,066 02	442.43	2 4
1878–79, .						1,033 05	436.73	2 3
1879-80, .			•	•		945 00	450.51	2 1
1880-81, .		•		•		949 65	451.79	2 1
1881-82, .						919 18	461.66	2 0
1882–83, .		_	_			992 10	466.76	2 1

The hospital has always been supplied with gas by the Northampton Gas Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since that time it has been but \$3.00, including meter-rent, and during the last two years with a discount of 5 per cent.

32. Trustees of the Northampton Lunatic Hospital.

NAME.	Residence.	When app'ted.	Service ended.	From what cause.
Charles E. Forbes,*.	Northampton, .	1856	1857	Term expired.
Lucien C. Boynton, .	Uxbridge,	1856	1858	46 66
Eliphalet Trask, .	Springfield,	1856	1875	44 14
John C. Russell,* .	Great Barrington,	1856	1859	Resigned.
Horace Lyman, .	Greenfield, .	1856	1857	Removed.
Charles Smith,	Northampton,	1857	1860	Resigned.
Luther V. Bell,* .	Somerville, .	1857	1859	66
Zebina L. Raymond,*	Greenfield, .	1858	1859	64
Franklin Ripley,* .	Greenfield,	1859	1860	Died in office.
Edward Dickinson,*	Amherst,	1859	1864	Resigned.
Walter Laflin,* .	Pittsfield,	1859	1866	Term expired.
Silas M. Smith, .	Northampton,	1860	1863	14 14
Charles Allen,	Greenfield, .	1860	1861	Resigned.
Alfred R. Field,*	Greenfield,	1861	1864	44
Edward Hitchcock, .	Amherst, ! .	1863	1879	66
Silas M. Smith,	Northampton, .	1864		Still in office.
Edmund H. Sawyer,*	Easthampton, .	1864	1879	Died in office.
Henry L. Sabin, .	Williamstown, .	1866	1876	Term expired.
Adams C. Deane,	Greenfield,	1875	-	Still in office.
Henry W. Taft, .	Pittsfield,	1876	_	
William M. Gaylord,	Northampton, .	1879	1883	Term expired.
Lyman D. James,	Williamsburg, .	1879	_	Still in office.
Christop'r C. Merritt,	Sprirgfield,	1883	-	61 61

Deceased.

33. Officers and Employés.

Time employed, March 1, 1883.

NAME.	Years.	Months.	Days.
Pliny Earle, M. D., Superintendent,	18	7	26
Edward B. Nims, M. D., Ass't Sup't,	14	2	14
Daniel Pickard, M. D., 1st Ass't Physician,	5	10	22
David G. Hall, M. D., 2d Ass't Physician, .	-	8	13
Walter B. Welton, Clerk,	17	-	14
John Mercier, Farmer,	15	8	-
Danford Morse, Engineer,	18	_	7
Robert H. Gallivan, Supervisor,	9	10	11
Lucy A. Gilbert, Supervisor,	16	-	18
F. Josephus Rice, Steward,	24	4	24
Mary Ward, Seamstress,	12	6	3
Charles Ziehlké, Baker,	20	6	_
Frances C. Earle, Assistant Clerk,	10	11	6
Minnie J. Guilfoil, Assistant Supervisor, .	4	5	24
Adelle Ford, Assistant Seamstress,	1	6	8
Minnie J. Howes, Laundress,	4	-	26
Victoria S. Pillinger, Assistant Laundress, .	6	8	9
Walter E. Pillinger, Attendant,	8	9	29
Willard C. Ellis, Attendant,	3	7	-
Edward Connors, Attendant,	1	8	9
Henry W. Estey, Attendant,	-	11	5
Frank L. Merrill, Attendant,	_	11	4
William J. Douglass, Attendant,	-	11	3
Clarence E. Fowler, Attendant,	_	11	7
James R. Hawkes, Attendant,	-	10	19
John L. Howard, Attendant,	-	8	23
Myron O. Barnard, Attendant,	-	1	17
James J. Douglass, Attendant,	-	- 1	. 8
Maria E. Graves, Attendant,	15	1	7
Martha R. Harris, Attendant,	8	6	7
Jane McGuire, Attendant,	7	10	3
Mary B. Ransom, Attendant,	7	8	15
Cécile Riel, Attendant,	6	4	23
F. F. Poor, Attendant,	4	4	13
Naomi A. Griffin, Attendant,	2	9	21
Laura G. Barrett, Attendant,	1	8	4
Barbara McDonald, Attendant,	1	7	9
Lillie V. Austin, Attendant,	_	8	29
Phebe Dimock, Attendant,	-	8	-
Philomène Goyette, Attendant,	-	7	16
Sadie A. McNeill, Attendant,	-	8	22
Céleste Goyette, Attendant,	_	3	3
Flora R. Brown, Attendant,	-	2	25
Emma Moodie, Attendant,	_	2	_
Jessie A Rand, Night Watch,	1	8	11
Hattie Halladay, Farmers' Dining Room, .	8	7	14
Katle M. Aldrich, Centre,	2	10	8
Ida R. Howes, Centre,	3	6	18
		ا مما	
Thomas C. Powers,	8	11	11

64 LUNATIC HOSPITAL, NORTHAMPTON. [Oct. '83.

Officers and Employés - Concluded.

NAME.	Years.	Months.	Days.
Lillian M. Works, Assistant Cook,	1	4	22
Lillian M. Ferry, Assistant Cook,	_	5	3
William C. Hall, Assistant Engineer,	17	5	17
Nicholas Riel, Night Engineer,	7	5 2	25
Andrew N. Thorington, Watchman, .	12	1	30
Sifroi Belville, Carpenter,	12	10	7
Walter Tower, Carpenter,	6	8	_
Alfred Parenteau, Painter,	17	6	18
David Mercier, Coachman,	6	_	14
Charles Egen, Assistant Baker,	6 5	5	4
Benjamin Rockwell, Assistant Farmer,	15	9	_
Elson E. Howes, Assistant Farmer,	5	11	23
Julius Freeman, Assistant Farmer,	5	7	24
Henry Wilson, Assistant Farmer,	8	10	8
Erie L. Ditty, Assistant Farmer,	5 5 3 2	9	26
William Simpson, Assistant Farmer,	1 1	5	-
George E. Mason, Assistant Farmer,	_	8	28

Thirteen of the persons have not been in their present situations during the whole period of service; for example, the supervisors, the assistant supervisor, and the seamstress, were formerly attendants.

Nine of the persons have been employed more than once. In these instances the table gives the total time of service.

TWENTY-NINTH ANNUAL REPORT

OF

THE TRUSTEES

OF THE

STATE LUNATIC HOSPITAL

AT NORTHAMPTON,

FOR THE YEAR ENDING SEPTEMBER 30, 1884.

BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 Post Office Square.
1885.

OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL:

TRUSTEES.

ADAMS C. DEANE, M.D.,							GREENFIELD.
HENRY W. TAFT, Esq.,			•		•		PITTSFIELD.
LYMAN D. JAMES, Esq.,				.•			WILLIAMSBURG.
HON. CHRISTOPHER C. MI	eri	RITT	Γ, .				SPRINGFIELD.
SILAS M. SMITH, Esq., .							NORTHAMPTON.
MRS. SARAH M. BUTLER,				•			NORTHAMPTON.
MRS. SARAH A. WOODWO	RT)	Ħ,					CHICOPEE.

RESIDENT OFFICERS.

PLINY EARLE, A.M., M.D.,		•	•	Superintendent.
EDWARD B. NIMS, M.D., .				Assistant Superintendent.
DANIEL PICKARD, M.D., .				FIRST ASSISTANT PHYSICIAN.
DAVID G. HALL, M.D., .		•	•	SECOND ASSISTANT PHYSICIAN.
WALTER B. WELTON, .				CLERK.
JOHN MERCIER,		•		FARMER.
DANFORD MORSE,	,			Engineer.

TREASURER.

PLINY	EARLE,	•	•		•	•		•	•		•	NORTHAMPTON.
Office at the Hospital.												

SUBORDINATE OFFICERS.

ROBERT H. GALLIVAN,	•	•	•	•	•	•	MALE SUPERVISOR.
LUCY A. GILBERT, .					•	•	FRMALE SUPERVISOR.
F. JOSEPHUS RICE, .	•						STEWARD.
MARY E. WARD,				•	•	•	Seamstress.
IDA D. HYDE,			•			• .	LAUNDRESS.
GEORGE B. WALKER,						•	BAKER.

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Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor of the Commonwealth and the Honorable Council.

Another fiscal year of the Northampton Lunatic Hospital having expired, the Trustees to whom the general direction and management of that institution are confided have the honor to present you a summary account of their proceedings, and of the general results of the operations of that charity during the mentioned period, — making their twenty-ninth annual report.

The by-laws of the hospital require a constant monthly meeting of our Board. These meetings have been regularly held, on the first Thursday in each month respectively, and the attendance upon them has been considerably larger than is required by law. At each of these meetings the apartments of the patients were visited and inspected. The member of the Board who resides in Northampton visits the hospital frequently, and often goes through those apartments at irregular times, sometimes accompanied by one of the physicians, and sometimes alone.

At the close of the next preceding fiscal year, September 30, 1883, the number of patients in the hospital was 469, 230 of whom were men and 239 women. The number admitted within the year covered by this report was, of men 61 and of women 75, making a total of 136. The whole number of patients who received the benefit of the hospital in the course of the year was consequently 605, of whom 291 were men and 314 women.

Not including deaths, the whole number of patients discharged was 117, 50 of them being men and 67 women. Twelve men and 13 women, a total of 25, died.

Of the 463 patients remaining in the hospital at the end of the fiscal year, September 30, 1884, 229 were men and 234 women. The daily average number of patients in the house was, of men 227 and of women 236, a total of 463. This number is less by three than in the next foregoing year. The maximum number in the house on any day within the year was 474, on the 26th of March.

This was not so large by eleven as the largest number in the next foregoing year. The smallest number on any day was 455, on each of nine days in June. This number exceeds by three the corresponding number of the preceding year.

The results of treatment of the 117 patients who were discharged, are recorded as recovered in 25 instances, much improved in 17, improved in 35, unimproved in 36, and not insane in 4.

For the details of the operations of the hospital, and of the results thereof in respect to the chief objects of the institution, the custody and cure of the persons committed to its care, you are referred to the accompanying report of the Superintendent, and the Appendix of statistical tables thereto attached.

The only department of the hospital in which wood is used as fuel is the bakery. As the waste wood upon the farm is more than sufficient to supply the fire for baking purposes, it was thought best, as being more economical, when the oven was rebuilt a few years ago, not to construct it for coal, a fuel requiring less labor in its preparation and use. Until late in the autumn of 1883, the wood had been housed and sawed in the basement of the north wing of the hospital. This place was thought to be a source of dauger, and consequently it was decided to prepare another, entirely detached from the hospital edifice. For this purpose an extension of the scullery had already been begun at the time of our report one year ago. It was completed and put in use before the coming of winter. This arrangement is found, in

practice, to be more convenient than the old one, and more cleanly, as well as less liable to dangerous accidents.

Prior to the introduction of the Roberts meadow water, the hospital had been supplied with water from a permanent spring upon the premises, about fifty rods from the central building. The water was raised by a steam-pump, from a reservoir near the spring, to the tanks in the attic. Ever since the contract was made with the commissioners of the public water-works, the pump-house and its machinery have been kept in working order, so that, in the event of any accident by which the supply from Roberts meadow should be cut off, recourse could be had to the house supply. But by the high wind on the 28th of December last, the chimney of the pump-house was overthrown, breaking off near the ground. It was found to have been very imperfectly constructed, the walls not thick enough, and the brick of all but the outside course insufficiently burned.

The importance of an unfailing supply of water is such that we did not hesitate in a decision to rebuild it; but as midwinter was approaching, the work was postponed to the opening of spring. The foundation for a new chimney was begun on the 11th of April, and the chimney finished early in May. It is six and a half feet square at the bottom, and 65 feet 4 inches in height, or about eighteen feet higher than the old one, which had never given a sufficiently strong and reliable draught.

A room in the basement of the south wing has hitherto been used as a paint-shop. Here were stored the oil, the spirits of turpentine and the other materials for painting. As all the liquids are bought by the tierce or the barrel, the quantity on hand is sometimes pretty large. In order to remove this source of peril to the safety of the inmates, a fire-proof brick building, about twenty-two feet long, four-teen feet wide and one story in height, has been erected in a place easily accessible, but sufficiently distant from the hospital building. Here the easily inflammable substances will hereafter be stored. The building has the aspect of a small cottage, and is an ornament rather than a detriment to the appearance of the grounds.

After the homestead of the late Samuel Day was pur-

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chased, in 1876, the barn which stood upon it was taken down and re-erected near the hospital barn. It was eighty feet in length by forty in width. At that time it was larger than was required for farming purposes, and it has been used, to a very considerable extent, hitherto, as a storehouse. But, since that time, land to the extent of about one hundred acres has been added, by purchase, to the farm, and the agricultural department of the establishment consequently and perhaps proportionally enlarged. Not only is it all needed, but prospectively, and in the near future, still further room. That room we decided to furnish immediately. In May the barn was raised, the necessary excavation for a cellar beneath it made, an extension of forty feet added to its westerly end, and the whole placed upon a substantial wall. On the north side and the two ends this wall is of split stone laid in cemented mortar. On the south side, where the surface of the land is on a level with the bottom of the cellar, it is of brick, with alternate wide, open spaces which are to be closed with doors suspended upon rollers. This cellar, like the building above it, is one hundred and twenty feet in length by forty in width, and is probably not exceeded in dimensions by any similar one in the western part of the State. It will be of great convenience and utility in the prosecution of the agricultural work.

Connected with this barn at its westerly end, and forming with it an elbow, a new wooden building has been erected for a poultry-house. It is forty feet long and twenty-five wide, with a height, in front, of twenty-one feet, and in the rear of fifteen feet, and a roof with but one slope. It has separate rooms for fowls and turkeys, and a chamber for the storage of their food or for other purposes. The old poultry-house is in the lumber-house. It is inconvenient, and the space occupied by it is much needed for the storage of lumber.

An extension of the cart-shed has been made by the erection of a one-story building forty feet in length by eighteen in width. The vehicles for farming purposes have become so numerous that this was much needed.

In the spring of 1883, as mentioned in our last year's report, work was begun upon a building intended, the cellar

for vegetables, the first story for a store-room, and the higher stories for shops and such other purposes as may be found convenient; but that work was necessarily suspended for the purpose of rebuilding a section of the main sewer of the hospital. The cellar was excavated and about three-fourths of the foundation and cellar wall, made of split granite, laid in cemented mortar, was completed last year. The work was resumed in the latter part of May of the current year, and has been satisfactorily prosecuted to the present time.

The main building is ninety-six feet in length by thirtythree feet in width, and three stories in height. Near the extremities of its southerly front project two wings, each about twenty-two feet square, which rise to the same height as the main edifice. The whole structure consequently forms three sides of a parallelogram. It is of brick, with brownstone water-table, door and window caps and window sills. The roof is completed, and the cellar and the first floor so far advanced that they are now in use. The building is very thoroughly constructed, none of the work having been done upon contract. It is one of the best specimens of masonry to be seen in Northampton. William F. Pratt & Son were the architects. The brick-work was done by Michael Keating and his employees; the carpentry under the direction of Waldy Tetro, and the stone-masonry of the cellar walls by Curtis Braman.

Various minor improvements have been made, especially in the grading of the farm roads and the grounds in the rear of the hospital buildings.

The *income* of the hospital for the board of patients is always different, in any given official year, from the actual earnings by the boarding of its patients, because the bills for board during the last quarter of the year are not collected, and not due until the year has expired.

The earnings of the year covered by this report were as follows:—

For State patients,				\$26,328 24
town patients,				42,695 44
private patients,		•		15,406 54
Total				4 84 480 99

The report of the Treasurer has been received and examined by the auditing committee. It will, as usual, be forwarded to you in connection with this. From the balances of the accounts it appears that, at the close of the fiscal year, Sept. 30, 1884, there were:—

The reserve fund,				\$10,000 00
And cash assets available for fut	use,		23,674 44	
Total,				\$ 33,674 44
And liabilities (bills payable),	•	•	•	8,672 41
Balance in favor of the hospital,		•		\$25,002 03

In addition to these still available cash assets, the hospital has on hand the representatives of cash, in a quantity of purchased provisions and supplies, the estimated value of which is \$15,445.23. It also has all the products of the farm which have not already been consumed.

The administrative officers of the institution are the same as at the close of the next preceding year, and but two changes have been made in the corps of subordinate officers; George B. Walker has taken the place of Charles Egen as baker, and Ida D. Hyde has succeeded Minnie J. Howes as laundress.

The condition of the hospital is satisfactory, and its facilities for easy and effective operation are greater than at any former time.

> A. C. DEANE. HENRY W. TAFT. LYMAN D. JAMES.

C. C. MERRITT.

S. M. SMITH.

S. A. WOODWORTH.

S. M. BUTLER.

NORTHAMPTON, Oct. 9, 1884.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE NORTHAMPTON LUNATIC HOSPITAL SEPT. 30, 1884.

Superintendent and physician, .		. per year,	\$2,500 00	
Assistant superintendent and physicis	an,	. "	1,500 00	
First assistant physician,		. "	900 00	
Second assistant physician,		. "	600 00	
Treasurer,			300 00	
Treasurer, for clerk-hire and paid to	a clerk, .	. "	200 00	
Clerk,			1,200 00	
Farmer,			600 00	
Engineer,		. "	900 00	
Assistant clerk,		. per month	80 00	
Supervisor (male),		. "	40 00	
Supervisor (female),		. "	25 00	
Assistant supervisor (female),		. "	20 00	
Seamstress,		"	20 00	
Assistant seamstress,		"	14 00	
Laundress,		"	18 00	
Assistant laundress,		"	18 00	
Baker,			35 00	
Steward,		"	54 17	
Assistant steward,		"	35 00	
Attendants (male) (4),		. "	3 0 00	
Attendants (male) (2),		. "	28 00	
Attendants (male) (1),			25 00	
Attendants (male) (3),		. "	23 00	
Attendants (male) (3),		. 44	21 00	
Attendants (female) (9),		. 46	18 00	
Attendants (female) (3),		"	· 16 00	
Attendants (female) (2),		"	15 00	
Attendants (female) (1),		"	14 00	
Night-watch (female),		"	18 00	
Housework, centre (female) (2), .		"	15 00	
Cook (female),		. "	16 00	1
Assistant cook (male),		. "	18 00	į
Assistant cooks (female) (2),		"	15 00	į
Assistant cooks (female) (1),		"	14 00)

Farmers' dini	ag-re	oom	(fem	ale),			. •	. per month	\$ 15	00
Housework, re	ear t	uildi	ng (femal	e),			. "	8	00
Watchman,			•					. "	30	00
Carpenter,								. per day	2	75
Carpenter,								. "	2	25
Carpenter,				<i>'</i> .				. "	2	00
Painter.								. per month	5 0	00
Assistant engi	neer	·, .						. "	32	00
Night enginee			rden	er in	sumi	ner,		. "	30	00
Coachman,							:	. "	28	00
Farm hands (4) ,							. "	28	00
Farm hands (2),							. "	25	00
Farm hand (1).							. "	23	00

In the warm season we generally hire some farm hands by the day. This year we have four, at \$1.50 per day, without board. They work mostly on improvements of the farm. 1884.7

INVENTORY OF STOCK AND SUPPLIES.

ON HAND SEPT. 30, 1884.

Live-stock on the	farm,									\$5,902	00
Produce of the fa	arm on	han	d, .							7,710	25
Carriages and ag	gricultı	ıral	imple	men	ts, .					3,715	00
Machinery and n	nechan	ical	fixtu	ев,						8,840	00
Beds and beddin	g in in	mate	es' de	partr	nent,					12,530	00
Other furniture i	n inms	ites'	depar	rtme	nt,	•				4,850	00
Personal propert	y of St	ate	in Su	perin	tende	nt's	depar	tmer	ıt,*	9,125	00
Ready-made clot	hing,				•					2,164	63
Dry goods, .										3,658	81
Provisions and g	roceri	8 9 ,			•					2,878	35
Drugs and medic	cines,						•	•		575	00
Fuel,		•					•	•		5,823	44
Library,		•		•			•	•		1,000	00
Paints and oils,		٠	•	•	•	•	•	•	•	850	00
Total										869,117	48

^{*} This term is here applied to the whole of the central edifice or block, and includes all the offices, the kitchen, the bakery, the laundry, the sewing-room and other apartments.

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

An appraisal of the property, both real and personal, of the hospital, a general account of the receipts and the disbursements of money in the course of the fiscal year 1883-84, and an exposition of the financial condition of the institution on the 30th of September, 1884, are contained in the following statement:—

_	1	Asse:	rs.				
Three hundred and forty ac	res of	lan	d,		\$43,000	00	
Hospital building, .				• .	250,000	00	
Farm house, \$2,000; brick h	10 1150	, \$2,0	000,		4,000	00	
Three dwellings (H. Day lo	t),		•		1,000	00	
Storehouse and shops, .					12,000	00	
Two barns,					5,500	00	
Horse stable,					2,000	00	
Scullery and wood-house,					700	00	
Lumber house,					1,200	00	
Pump house,	•	•			1,000	00	
Cart shed,					500	00	
Coal house,					400	00	
Piggery,	•		•		200	00	
Fire-proof for oils and paint	ts,			•	500	00	
Two ice houses,	• .				600	00	
				-			\$ 322,600 00
P.	ERSO:	NAL :	Esta	TE.			
Stock and supplies on hand,						to	
the Trustees' report, .						•	\$ 69,117 48
Reserve fund,	•	•					10,000 00
	R	ECEI	PT8.				
Cash on hand Sept. 30, 1883							\$5,566 49
Received from the State tree							27,030 44
from towns, .							46,552 51
from individuals,							15,689 46
from sales, .							2,355 67
from interest, .							775 64
						-	\$97,970 21

PAYMENTS.

1st.	Salari	es and labor,							\$27,922	08
2d.		ions and suppl	ies, vi:	z.: —		•		•	4-1,5-2	••
		ats of all kinds				_	\$6,842	04		
		h of all kinds.				-	1,481			
		iit and vegetab		•	·	-	2,401			
		our,		•	•	•	3,823			
		ain and meal fo			•	•	775			
	-	ain and meal fo		•	•	•	1.570			
		a, coffee and ch		_,	•	•	904			
		gar and molass		٠,	:	•	2,111			
		tter and cheese	-	•	•	•	4,786			
		t and other gro			•	•	2,719			
		other provision		•	•	•	124			
	All	other provisio	us,	•	•	•	124	02	07 590	o z
0.3	(1)-41							_	27,539	
3d. 4th.		ning, and lights, .	•	•	•	•	• •	•	3,689	
5th.		icines and medi	!a=1 a=	11.	•	•	• •	•	6,893	
						•	• •	•	1,178	
6th.		iture, beds and				•		•	8,349	
7th.		sportation and					• ,•	•	389	
8th.		nary constructi					• •	•	1,551	
9th.		aordinary cons					• •	•	15,791	07
10th.		ellaneous expe	nses,	inciu	aing	_				
	1.	•	•	•	•	•	\$1,701			
	2.			•	•	•	3,366			
		Water, .		•	•	•	750			
		Minor expens		•	•	•	875	26		
	5.	Contingencies	ι, .			•	1,208	59		
						-			7,901	69
,	Potel o	xpenditures,						-	\$96,204	
-	I OLAI 6	xpenditures,	•	•	•	•		•	\$30,20 ±	02
			L	IABII	ITIE	5 .				
Salar	ies and	l wages due O	xt. 1. 1	884.					\$3,807	47
		us bills due,							4,864	
								_	·	
		·							\$8,672	41
Dae	tha inc	titution for boa	*4 O^	. 1	100/					
	from S		•	v. I,	1001,	_	\$6,495	90		
•		wns,	•	•	•	•	11.345			
		dividuals, .	•	•	•	•	8,967			
		iterest,	•	•	•	•	100			
Desa 4		reasurer, Sept.	οΛ 10		•	•	1,765			
Due 1	иош т	roasurer, sept.	JU, 10	×,	•	•	1,700	บฮ	6 9 9 27 4	44
						_			\$23,674	33

SUMMARY.

Total receipts,										\$ 97 ,9 70	21
Total payments,	•	•	•	•	•	•	•	•	•	96,204	62
Cash on hand Se	pt. 30	, 188	4,	•	•					\$1,765	59
Total liabilities,										\$8,672	41
Total debts due	the in	stitut	ion,							23,674	44
Total expenditu	res, in	cludi	ng ne	w bu	ildi	ıgs,	•	•	•	96,201	62
Dividing this s	um l	y 46	33.05,	the	878	rage	nur	nber	of		
patients, we ha	ave th	e ave	rage	expe	ndit	ure p	er pa	tient,	, .	\$207.76	29
And the average										3.9	84
Deducting from										\$96,204	62
The extraordina	ry exi	ense	8, .	•	•	•	•	•	•	15,791	07
We have the	eurr	ent e	xpens	es,		•		•		\$80,413	55
Dividing \$80,41	3.55	by 4	63.05,	the	ave	rage	nur	nber	of		
patients, we h	ave th	e ave	erage	expe	ndit	ure p	er pa	atient	, .	\$173	66
Making the aver	age v	reekl	y exp	endit	ure	per p	atien	it, .	•	3	33
Adding to the cu	ırrent	cash	expe	nditu	re,	•				\$80,413	55
The decrease of	perso	nal s	ssets,	•	•	•	•	•	•	542	26
We have the	e spps	rent	neces	sary	cost	for ti	he ye	ar,	•	\$80,955	71
Dividing \$80,95											
patients, we h								ient,	•	\$174	83
Making the aver	rage v	veekl	y cost	t of e	ach	patie	nt,	•	•	3.8	353

PLINY EARLE, Treasurer.

NORTHAMPTON, Oct. 9, 1884.

We have audited the Treasurer's accounts and found a satisfactory voucher for every entry.

A. C. DEANE.

L. D. JAMES.

NORTHAMPTON, Oct. 9, 1884.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

Of all the leading or prominent events in the history, for the last official year, of the public charity confided by the Commonwealth to your general direction and oversight, you are already informed. It now becomes my duty to lay before you an exposition of the results of the operations of the institution during that period. In the performance of that duty, I begin with the usual table, which contains, in statistical form, the general facts recorded in the medical department of the institution.

1. General Statistics, 1883-84.

		Males.	Females.	Totals.
Patients in hospital Oct. 1, 1883,		230	289	469
Admitted within the year,	.	61	75	136
Whole number of cases within the year,	.	291	814	605
Discharged within the year,	.	62	80	142
Viz.: as recovered	.	9	16	25
much improved	. 1	6	11	17
improved,		16	19	85
unimproved	. 1	16	20	36
not insane.		8	1	4
Deaths	. 1	12	13	25
Patients remaining Sept. 30, 1884,		229	234	463
Viz.: supported as State patients, .	. [83	71	154
town patients, .	11	114	138	252
private patients, .	ΞI	32	25	57
Number of different persons within the year	IF.	286	308	594
admitted	'!	59	72	181
recovered.		9	16	25
Daily average number of patients, .		227.15	235.90	463.0

As shown by this table, the whole number of admissions within the year was, of men 61 and of women 75, making a total of 136. But these admissions do not, all of them, represent different persons. Two of the men and 3 of the women, a total of 5, were admitted twice each. It consequently follows that the number of persons admitted was only 131, of whom 59 were men and 72 women. This large predominance of females is unusual.

The whole number of patients or cases in the hospital in the course of the year was, of men 291 and of women 314, a total of 605. Included in this number are the 230 men and 239 women, a total of 469, who were present at the beginning of the year. Of these, however, no less than 6, of whom 3 were men and 3 women, were afterwards discharged, but re-admitted before the close of the year, and appear in the number of admissions. As patients, therefore, they were counted twice. As persons they should be counted but once. In this way the number of persons is shown to be less by 6 than the number of patients. This reduction (6), added to the reduction (5) caused by the admissions of 5 persons twice each, makes a total of 11. Consequently, the whole number of persons in the course of the year was (605-11) 594, of whom 286 were men and 308 women.

Neither of the 5 persons who were admitted twice each was discharged as recovered on the first of those admissions. Of the 6 who were in the house at the commencement of the year, but who were subsequently discharged and readmitted, 1 of the men was discharged recovered.

Of the 125 persons admitted, 24 men and 17 women, making a total of 41, or very nearly one-third of the whole, have been in the hospital as patients more than once each. Eighteen men and 12 women, a total of 30, have been admitted twice each; 4 men and 2 women, three times each; 1 woman, four times; 1 man, five times; 1 woman, six times; 1 man, eleven times; and 1 woman, fourteen times. The two patients last mentioned are brother and sister.

Of the 30 persons who have been here twice each, 4 men and 4 women, a total of 8, were discharged as recovered on their first admissions; 4 men were discharged as much im-

proved; 5 men and 2 women as improved; 1 woman as relieved; and 5 men and 5 women as unimproved.

Of the 6 who have been here three times each, no one of the 4 men had been discharged as recovered on either admission. Two of them had been discharged improved both times, and 2 as improved the first time and unimproved the second time. Each of the 2 women was discharged as recovered on her first admission, and as improved on the second.

The woman who has been here four times, was discharged as improved twice, and recovered once.

The man who has been here five times, was discharged as recovered twice, and improved twice.

The woman who has been here six times, was discharged as unimproved five times.

The man who has been here eleven times, has been discharged as recovered four times, much improved once, and improved five times.

The woman who has been here fourteen times, has been discharged as recovered ten times, and improved three times.

The number of patients or cases admitted, was not so large by 11 as it was in the official year 1882-83. The same is true of the number of persons admitted. This diminution is regarded merely as incidental, and not as an indication of any permanent or progressive decrease of the amount of insanity in the western section of the State.

The largest number of patients in the hospital on any day in the course of the year, was 474, on the 26th of March; and the least number on any day was 455, on each of nine successive days in the latter part of June.

The daily average number of patients in the house for the year, was less by 3 than in the next foregoing year.

STATUS OF PATIENTS.

As a rule, which, so far as I am informed, has no exceptions, the State institutions for the insane, in all the Northern and Middle States of this country, and all Western States lying north of the Ohio River, were intended for, and now receive, patients from all classes of the population. They were founded for the benefit of the people, without any dis-

tinction, or discrimination, or exception whatsoever. Each Commonwealth which has founded a hospital or an asylum of the kind, has based it upon the broad principle of the promotion of the common weal. There are differences, however, in the different States, in the method of application, or the carrying out of this fundamental law. When the hospital at Columbus, Ohio, was established, the legislature of that State, with a comprehensiveness of view and a breadth of liberality thitherto unprecedented, ordained that the whole cost of the operations of the institution should be paid from the treasury of the Commonwealth. As the law has not been changed in this respect, it consequently follows that any citizen of Ohio, of what rank soever in either the civil or the social scale of society, may claim and receive the benefit of treatment, without expense to himself, in either of the four institutions for the insane now belonging to that State. Payment is permitted, if the patient or his friends or sponsors so prefer, but it is not demanded.

Of the other States in the sections mentioned, a very few have followed the precedent thus introduced by Ohio. In most of them, however, direct payment to the institution is required from persons who have pecuniary ability to meet the expense; while from those who are dependent upon public beneficence, payment in each instance is received from the treasury of the organic body, whether State, county, or town, which, under the law of each State, respectively, is responsible for the support of the patient. In quite a number of the States those organizations are the State and the counties; but in Massachusetts they are the State and the cities and towns. Hence the inmates of the institutions in this Commonwealth are of three classes: State patients, town patients, and private patients.

The cost of the support of the 136 patients received within the year, was charged, at the time of admission, as follows; namely, to the State in 34 instances, to cities or towns in 80, and to individuals, or some representative of private funds, in 22. In regard to cities and towns, there was no instance in which this responsibility for support was transferred to any other authority, either public or private; but in four instances in which the responsibility was originally thrown

upon the State, it was removed to cities and towns. One patient supported, at first, by private funds, was subsequently made a beneficiary of the Commonwealth.

The whole number of patients discharged in the course of the year, including those who died, was 142. Of these, 34 were supported by the State, 88 by cities and towns, and 20 by private property.

There were 463 patients remaining in the house at the end of the year. Of these, 154 derive their support from the Commonwealth; 252 are wards of cities and towns; and 57 are chargeable to their relatives, friends, guardians, or other representatives of private funds.

Chiefly, probably, in consequence of the modification of the laws of settlement, an important change, as has been mentioned and demonstrated in some previous annual reports, has been taking place in the relative proportion of the two dependent classes; while a very considerable reduction of numbers in the independent class, has resulted from a discontinuance of the practice of receiving patients who are non-residents of the State.

The following table shows the weekly average numbers in the hospital, of each of these classes, during the last two official years. Those numbers were derived from the totals of the numbers in the house on the evenings of the fifty-two Saturdays within the year:

			1882-88	•	1888-84.				
		Males.	Females.	Total.	Males.	Females.	Total.		
State patients, .	٠.	87.34	74.28	161.62	83.37	71.73	155.10		
Town patients, .		118.98	128.65	247.63	113.88	137.35	251.28		
Private patients,		29.26	28.32	57.58	29.87	26.19	56.06		

These figures demonstrate the continued diminution of the numbers and the relative proportion of patients chargeable to the Commonwealth, as well as a corresponding, though not identical increase of those who are supported by cities and towns.

The weekly average of the whole number of patients was 462.39.

RECOVERIES.

The line of demarcation between sanity and insanity is so indefinite, and the opinions of men so often differ upon the question of the sanity or insanity of a given individual, that, for some years past, when writing these annual reports, I have hesitated positively to assert that any definite number of the patients who have been treated in the hospital have fully regained a condition of mental soundness. The same course will be pursued this year.

Judging in accordance with our standard of mental health, and our opinions in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncrasy, education and habits, twenty-five of the patients who have left the hospital in the course of the year just expired, had so far attained the natural condition of their mental faculties as to make it appear proper to adjudge them as recovered. Nine of them were men and sixteen women. Twenty-one of them had never before been treated in the hospital. Two men and one woman were here on their second admission. The woman, and one of the men, had been discharged as recovered on their first admission. The other man had been discharged as much improved. After he left the hospital he fully recovered, and successfully pursued his usual business for more than three years.

One woman was here on her fourteenth admission. She had previously been discharged as recovered, ten times, and improved three times. She has now contributed eleven recoveries to the statistics of insanity, and, judging the future by the past, that number will be increased in coming years. The total record of the recoveries of the four persons, is fifteen.

No one of the twenty-five patients was discharged recovered more than once within the year, and, consequently, the number of *patients* and the number of *persons* discharged recovered, is the same.

It is a fact well known to those who are conversant with insanity, and which has so often been mentioned in the an-

nual reports of the institutions for the insane that it ought to be known by the people in general, that mental disorders are vastly more curable in their early stages than at later periods. The prospect of recovery diminishes rapidly, becomes very small before the lapse of the first year, and is an almost infinitesimal quantity at the end of the second year. Such has been the result of the experience at the hospitals, and such has been the teaching from them throughout the course of the last fifty years. For the purpose of exhibiting the effect—or, rather, the non-effect—of that instruction upon the people at large, a statement of the duration of the insanity of the patients who were received within the official year just expired is here introduced.

Of the one hundred and thirty-three patients admitted, only forty had been insane less than six months. Seventeen had each been insane during a period of from six to twelve months; thirteen from one to two years each; seventeen from two to five years each; fifteen from five to ten years each; and five over twenty years each. There were fifteen cases in which the time of the origin of the mental disorder was reported as unknown. From this exposition it will be evident, not only that the task imposed upon the medical officers of the institution is peculiarly discouraging, but that the percentage of recoveries cannot be expected to be otherwise than small. We have no miraculous method for the removal of a confirmed disease of the brain, and the restoration of the permanently insane man to sanity.

The question of curability and incurability, as reported by the superintendents of the institutions for the insane, is to some extent affected by an agent other than that of the duration of the disease before the patient is subjected to curative treatment in the hospital. I allude to the age of the patient. As a rule, persons in early and middle life are more likely to recover than those who are more advanced in years. This, of course, might be expected, inasmuch as they retain to a greater degree their original vigor of constitution, and are consequently more susceptible to the influence of remedial agents. But the practice is apparently increasing of bringing to the hospital persons of the latter class. Among the

patients received in the course of the last year, there was one who was over eighty years of age, and no less than seven whose ages ranged between seventy and eighty years, three of them being seventy-five or more. It cannot be expected, unless in very exceptional cases, that persons so far advanced will ever recover their mental soundness. Most frequently the unsoundness is the consequence of old age, and the beginning of the breaking down of the constitution.

Aside from the incurability of these patients, there is another question which has an important bearing upon the propriety of sending them to the hospitals. They have so long been accustomed to the independence of home, and to all their homelike comforts and associations, that the removal of them to a public institution, where that independence is measurably lost, and where they are subjected to new surroundings, as well as to a certain degree of discipline to which they have never been accustomed, but which is absolutely necessary to the best welfare of the inmates, has a detrimental rather than a beneficial effect. They cannot accustom themselves to this new mode of life. It is strange and uncongenial. Under these circumstances, the little vigor of constitution which yet remains to them begins to fail, and their lives are brought to an end, not infrequently, much sooner than they probably would have been had not the life of home been exchanged for life in a public institution.

Of the 25 patients who recovered within the year, 6 were supported by the State, 14 by cities and towns, and 5 by private funds.

DEATHS.

As will be shown upon a subsequent page, one of the characteristics of the year just closed is the comparatively small mortality among the patients. The number of deaths was only 25, 12 of which were of men, and 13 of women. Of the diseases leading to these results, the largest number, as might reasonably be expected, were in that class the origin or seat of which is in the brain and the nerves; but, as usual, the largest number of patients removed by any one disease, is found under the head of phthisis, or consumption. Of these there were 6, 2 of whom were men,

and 4 women. Of those who died from natural causes, the next leading number, 3, were the result of paralysis. Two each died from pneumonia and organic diseases of the brain; and one each from epilepsy, paresis, progressive paralysis, exhaustion of acute mania, exhaustion of chronic mania, disease of the heart, pleurisy, inflammation of the liver, and old age. To these we are unfortunately obliged to append three from an unnatural cause, suicide.

It is a well-known fact that a propensity to self-destruction not unfrequently becomes epidemic. It is no less true that, in hospitals for the insane, at least, actual suicides, even when not the result of an epidemic tendency thereto, are very likely to occur so near to one another, in point of. time, that, in the review of the history of a series of years, they appear to be arranged in groups, with sometimes widely intervening spaces. An illustration of this is found in the experience of this hospital. From the 27th of January, 1872, to the 5th of January, 1880, a period of only twentytwo days less than eight years, there was no death here of which there could be even a suspicion that it was the result of the direct intention and act of the person who died. From and including the year last mentioned, there was a period of three years, no one of which was free from these fatal occurrences. This was followed by an interval of one year of exemption, to be succeeded by the experience of the year just ended. In two of the cases occurring within the last year, no propensity to suicide had been manifested or suspected.

The history of the hospital, since its opening, now extends over a period of twenty-six years. According to the records there have been 21 suicides, 15 of them by men and 6 by women. Eleven of them occurred within the first thirteen years of that period, and 10 within the last thirteen. Hence, the distribution of them between the half-periods, is, in point of numbers, nearly equal; but in the relative proportion between those numbers and the number of patients under treatment, it is quite unequal. The daily average number of patients during the first thirteen years was only 353.5; but during the last thirteen it was 456.47. From a calculation based upon these numbers, we derive the

fact that the relative proportion of suicides to the average number in the house during the last thirteen years, was to the same proportion during the first thirteen, as 59 to 100.

In several preceding annual reports it has been shown that, in each of those years, the proportion of deaths among the men was larger than that of the women. It has likewise been shown that, in the whole period of the existence of the hospital, the relative mortality among the men has very considerably exceeded that among the women. In this respect we have now had an exceptional year. Of the 286 men who were under treatment in the course of the year, 12, or a percentage of 4.19, died. Of the 308 women, 13, or the larger percentage of 4.22, died. Although the proportion is larger among the women, yet the difference is very small. Calculated upon the daily average number of the two sexes in the house, the deaths of men were equal to 5.28 per cent., and those of women 5.51 per cent. latter method of calculation the difference in favor of men is larger than by the former.

Of the 25 patients who died, 5 were beneficiaries of the State, and 17 of cities and towns, while 3 derived their support from private sources.

The following table contains a statistical record of the mortality in the hospital during the whole period of its existence:—

Deaths and their Ratios from Sept. 30, 1858, to Oct. 1, 1884.

	0 4	5 d		DEATHS.		No. No.	o de o
OFFICIAL YEAR.	Whole No. of Patients.	Daily Average No. of Pa- tlents.	Men.	Women.	Total.	Per cent. Whole J of Patte treated.	Per cent. on listly Aver- age No. of Ferients
1858-59,	313	229.55	7	12	19	6.07	8.27
1859-60, .	398	255.96	9	18	27	6.78	10.54
1860-61, .	484	314.26	15	15	80	6.91	9 5
1861-62, .	442	313.80	9	10	19	4.29	6 0
1862-63, .	470	355.28	19	7	26	5.53	7 31
1863-64, .	475	357.63	17	30	47	9.89	13.14
1864–65, .	469	342 40	17	24	41	8.76	11 97
1865-66, .	488	3 76.35	18	13	31	6.35	8.28
1866-67, .	543	401.03	23	24	47	8 65	11 71
1867–68,	565	418.41	25	18	43	7.61	10.40
1868-69, .	590	405.10	13	12	25	4.23	6.17
1869-70, .	604	408 83	22	11	33	56	8.07
1870-71, .	616	421.90	16	12	28	4.54	6.6
1871-72, .	619	428.72	19	18	37	5.97	8.6
1872-73, .	614	437.23	13	8	21	3.42	4.8
1873-74, .	626	469.54	14	11	25	8.99	5.33
1874-75, .	629	475.35	23	18	41	6.5 !	8.6:
1875–76, .	629	474.21	18	19	37	5.88	7.80
1876–77, .	603	476.16	21	21	42	6.96	8.89
1877–78, .	551	442.43	14	9	28	4.17	5 19
1878-89, .	535	436.73	14	9	23	4.29	5.27
1879-80, .	559	450 51	17	12	29	5.19	6.1
1880-81, .	569	451.79	16	10	26	4.57	5.7
1881-82, .	587	461.63	24	14 -	38	6.47	8.23
1882-83, .	606	466.76	17	13	80	4.95	6 4
1883-84, .	605	463.05	12	13	25	4.13	5.39

The very low rate of mortality for the year is made evident by the figures in this table. The ratio of deaths, as compared with the whole number of patients under treatment, is smaller than in either one of twenty-three years, and is in excess of that of only two years. The similar ratio, as calculated on the daily average number of patients in the house — the more correct method — is larger than in four of the preceding years, and smaller than in twenty-one.

The tables below are introduced, as they have been in the last two foregoing years, for the purpose of showing the percentage of deaths during the whole period, and the two half-periods of the hospital's existence, as well as the relative mortality of the last year as compared therewith.

Calculated upon the whole number of patients under treatment, the mean or average mortality was, —

For the whole period of twenty-five	э уе	ars,		5.75 p	er cent.
For the first thirteen years, .				6.49	44
For the last thirteen years, .				5.13	66
While for the last year it was only				4.13	44

Calculated on the daily average number in the hospital, it was, —

For the whole period of twenty-five	э уе	ars,		7.72 per cen	t.
For the first thirteen years, .	•			9.05 "	
For the last thirteen years, .				6.69 "	
While for the last year it was only				5.39 "	

It will be perceived that, calculated in either of the two ways, the mortality of the year just ended was very materially lower than that of either of the periods for which the percentage is shown. Calculated by the latter method, it is not so large by 67 per cent. as in the first thirteen years, and by 24 per cent. in the last thirteen. The relative proportion of deaths of the first thirteen years exceeded that of the last thirteen, by 35 per cent. It may, perhaps, not be considered either pretentious or presumptuous, to claim that the large reduction of the mortality of the latter period is chiefly attributable to improvements in the hospital and in the details of the treatment of its inmates; and I venture to assert the belief that you, the Trustees of the institution, and all to whom the inner history of the establishment has been familiar, will not differ from me in this opinion.

WORSHIP AND ENTERTAINMENT.

As heretofore, and from the first opening of the hospital for the reception of patients, religious exercises have been conducted in the chapel on the afternoons of all the Sabbaths of the year, by ministers of most of the denominational churches of Northampton and its vicinity, or, occasionally by those from a distance who have been temporarily in the neighborhood. The average attendance of the household at these assemblies, during the year, has been not far from two

hundred and seventy. The largest number on any day was two hundred and ninety-seven.

As a firm believer in the utility, not of these gatherings alone, but of similar ones on the evenings of secular days, for the instruction, entertainment or amusement of the inmates, I have not hesitated to pursue the course of former years, in thus ministering to what is believed to be the best welfare of those who are committed to the care of the institution.

The general character of these exercises, and the frequency of each during the official year, may be ascertained from the following list:—

EXERCISES IN THE CHAPEL.

1.	ON THE SABBATH, — Divine worship,		52	days.
2.	On Secular Evenings,—			
	(a) Reading and Recitations, opened and closed with s	หน	sic :	
	The Bible,		14	44
	The Bible and selections of prose,		8	**
	The Bible and selections of poetry,		35	ée
	The Bible and recitations of poetry,		2	44
	Miscellaneous selections of prose,		74	44
	Miscellaneous selections of poetry,		24	44
	Miscellaneous selections of prose and poetry,		87	**
	Recitations of poetry,		8	**
	(b) Lectures: —			
	Reminiscences of a soldier in the late war.		10	44
	Pneumatics, using the air-pump,	•	2	66
	Elasticity, using clastic and non-clastic balls,	•	1	44
	Missionary work in India,	•	1	44
	Twenty years in the hospital,	•	1	44
	I would louis in monthmust.	•	•	
	(c) Olher Entertainments:—			
	Esmeralda,	•	1	44
	Pictures shown with the stereopticon, .		7	66
	Concert,		1	46
	Concert and readings,		1	64
	Ventriloquism,		1	44
	Sleight of hand exhibition,	•	1	44
	(d) Social Assemblies: —			
	Quadrille parties,		19	64
	No assembly,		76	44
	210 11011111111111111111111111111111111	·	_	
	Total,	•	366	days.

There are two visiting days in each week at the hospital, and as they impose a somewhat heavy burthen of work upon its officers and the employees having charge of the patients, the evening exercises were omitted upon those days during the three summer months. It has been customary, also, for several years, to omit them on the evenings of the monthly meetings of the Trustees, and of the visits of the Governor, the Legislative committee and the State Board of Charity.

It will be perceived that the number of days upon which the patients assembled was two hundred and ninety. The list of exercises contains the usual variety, and reveals the fact that, aside from music, reading is the most predominant. I am convinced that, where these gatherings are so frequent as at this hospital, it is best that it should be so. No other inexpensive exercise requires so little labor in its preparation, or furnishes so much entertainment for a given amount of that labor. At some institutions the exhibition of pictures by the stereopticon is made the leading and most frequent resource in this department of the so-called moral treatment of its patients. In our experience less satisfaction is given by a continued series of these exhibitions than by a similar series of readings. The darkened room required by them is a serious objection. The pleasure at first derived from them soon palls, and whenever we have had a series of them in successive or nearly successive evenings, we have had from some of the patients the direct expression of a desire for a return to the usual course of readings. They are an excellent occasional entertainment, but when they become continual, or nearly so, they subject themselves to the criticism of the old proverb, "Too much of a good thing is good for nothing."

Not the least interesting or satisfactory of all the entertaiments of the year were the "Reminiscences of a Soldier in the late War," given in a series of ten lectures. The lecturer was himself the "soldier," and, during the period of several weeks, in the course of which they were delivered, a patient in the hospital. He is a ready and fluent speaker, and both understands and practices the method of claiming the attention of an audience by a judicious intermingling of the pathetic and the humorous with the narrative of his subject.

The lecture on "Missionary Work in India" was also given by a patient, who spoke out of his own experience and observation.

FARM.

If regarded as a whole, the season of seed-time and harvest of the year 1884 has been a very favorable one upon the hospital premises, and the aggregate of crops has been larger and more valuable than in any preceding year in the history of the institution. And yet that season was unpromising in its earlier periods. Planting was necessarily postponed to a later date than usual, and the severe frost of the night of the 29th-30th of May killed the early potatoes, the beans, the tomatoes, the melons and the broom-corn, so that it was necessary to replant them. And it is worthy of remark that the products of these replantings were both abundant in quantity and excellent in quality. In no previous year have we had finer tomatoes, and the potatoes were among the largest and best of all that were produced.

The same frost apparently retarded the growth and diminished the quantity of grass, so that, although other circumstances seemed even more favorable than in 1883, yet the quantity of hay from the first cutting was less by about thirty-nine tons than in that year. This deficiency, however, was in part recompensed by an excess of sixteen tons in the after-growth. The whole crop of rowen was thirty-eight tons, the same as that of 1881, and larger than that of any other year.

Upon this farm this is the "bearing year" for apples. The late frost injured the fruit in some places in the neighborhood, and for a time it appeared as if, for this, or some other reason, the crop here would be a failure. The product, indeed, of the largest orchard was much less than it has been in some years. And yet, in this direction, the promise of harvest has not failed, but has been abundantly fulfilled in a yield of more than eleven hundred barrels of apples suitable for domestic purposes, besides a sufficient quantity of the poorer ones to make, by estimation, a hundred barrels of

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cider. Fruit larger in size or finer in quality is rarely seen. Many limbs have been broken by the weight of it from the trees, and many more would have been had they not been supported.

LIST OF PRODUCTS.

Hay, (first growth of ho			106	tons	, at \$	17,	•		\$1,806	
Hay (south lot), 18‡ tons			•	•	•	•	•	•	318	
Hay (Clarke orchard), 1				•	•	•	•	•	195	
Hay (after-growth of wh		arm),	387	tons,	at \$1	.7,	•	•	650	
Corn fodder, dry, 20 tons	١,	•	•	•	•	•	•	•	160	
Oat fodder, 13 tons, .	•	•	•		•		•	•	169	
Corn, 400 bushels, .	•	•	•				•		260	
Potatoes, 3,309 bushels,	•	•	•	•	•		•	•	1,654	
Broom-seed, 45 bushels,	•		•	•			•		18	00
Broom-brush, 800 pounds	3,			•	•	•	•		40	00
Carrots, 115 bushels,			•	•		•			40	25
Beets, 1,515 bushels, .		•							606	00
Onions, 90 bushels, .									45	00
Turnips, 350 bushels,									140	00
Parsnips, 60 bushels,			•						36	00
Beans (Lima), in shell, 9	3 <u>1</u> bi	ıshels	,						140	25
Beans (common), in shel									20	00
Beans (string), 27 bushel									59	87
Beans (Lima), dry, 4 bus									16	00
Pease (green), in pod, 82									91	00
Sweet corn (green), in ea				3,					211	50
									155	50
Lettuce, 107 bushels,									107	00
Cucumbers, 1241 bushels									124	50
Squashes (summer), 57 b		ls.							57	
Squashes (winter), 5 tons		·							100	
Melons, 2,260 pounds,	•								22	
Asparagus, 181 bushels,									55	
Pie-plant, 46 bushels,				_					66	
Beet greens, 3 bushels,								_		00
Spinach, 8 bushels, .	•			_	•	•	•	·		00
Cabbages, 3,600 heads,						•			108	
Currants, 17½ bushels,		•	•	•	•	•		•	40	
Apples, 1,153 barrels,	•	•	•	•	•	•	•	•	1,429	
Pears, 18 bushels, .	•	•	•	•	•	•	•	•	36	
Quinces, 1 bushel, .	•	•	•	•	•	•	•	•		00
Veal, raised here, 749 por	ande	•	•	•	•	•	•	•	95	
Pork, 10,192 pounds,	unus,	•	•	•	•	•	•	•	813	
Pigs, sold, 41,	•	•	•	•	•	•	•	•	109	
-	•	•	•	•	•	•	•	•	109	
Pigs, roasting, 4, .	•	•	•	•	•	•	•	•	-	
Turkeys, 171½ pounds,	•	•	•	•	•	•	•	•	41	31

Chickens, 138 pound	đs,								\$28	42
Heads and plucks,						.•			15	5 0
Eggs, 225 dozen,									58	39
Milk (grass-fed), 32	2,204	qua	rts,						1,932	24
Cider, 100 barrels,									200	00
Calfskins, 7, .			• .						8	75
Young calves, sold,	18,								43	50
Wood, 25 cords,					•				62	50
Lumber, 3,000 feet,									30	00
Fence posts, 465,									93	00
Corn husks, 1 ton,	•		•	•	•		•	•	14	00
								-	12,544	18

In regard to a part of the products, the quantities in the above list are estimates rather than the results of measurement; but, up to the time of the present writing—two weeks after the list was made—the gathered quantities have exceeded those estimates.

The total valuation, as seen in the table, is larger by \$1,111.16 than that of 1883, and larger by \$2,573.97 than that of 1882. It is also in excess, by \$967.90, of that of 1881, which was the largest product of any foregoing year since the foundation of the hospital.

In the annual report for every year since 1864, the quantity of milk to which a valuation was given in the list of agricultural products, was but one-fourth of the actual quantity produced, because it was estimated that not less than three-fourths was the product of the hay, grain and roots to which a full valuation had already been given. The pasturage upon the farm is now more than twice as great as it was in 1865, and consequently the proportion of grass-fed milk has been increased. The quantity valued in the list has therefore been changed from one-fourth to one-third of all that is produced. The whole production for the year was 24,153 gallons, averaging 66 gallons per day.

At the end of the official year the farm-stock consisted of 9 horses, 8 working oxen, 3 fat oxen, 2 bulls, 31 cows, 5 fat cows, 5 heifers, 2 calves, 136 swine, and the usual quantity of poultry.

LETTER BOXES.

By an act of the legislature of 1874 the institutions for the insane in the State of Massachusetts were required to place locked letter-boxes in their wards, in which the patients might deposit letters addressed to the Superintendent or to the Board of State Charities. The Superintendent was to furnish the patients with the materials for writing, and the boxes were to be opened and the letters distributed monthly, by the State Board. The members of the legislature were stimulated to the enactment of this law by the assertion that a very considerable proportion of the patients were improperly and unjustly detained in the hospitals, and that the only reason that they were not set at liberty was the impossibility, on their part, to communicate, by letter, with their relatives, friends or other authorities. It was further asserted that, should a law of the kind be enacted, the consequences would be not only the regaining of liberty by many persons improperly held in custody, but the acquisition, by their removal, of so much room for the accommodation of patients in the future, that the necessity for the construction of another hospital would be very considerably postponed.

In obedience to the requisitions of this law, twenty letterboxes, some one of which is accessible to every patient in the house, have now been in our wards more than ten years; but the prophecies in regard to them have not here been fulfilled. No one of our wards has been vacated as a consequence, but all of them have, at all times, been overflowingly full. No scores or dozens of our patients have been restored to liberty through this medium of action. Furthermore, there has not been a single instance of a patient so removed, and throughout the long period of a decade of years no letter has been placed in either of the boxes which has given cause or occasion for any member of the State Board, or any one of its agents, to say anything to the Superintendent in regard to the insanity of the person who wrote it, or of the propriety and justice of the detention of that person in the hospital. From my point of view these facts constitute an important comment not alone upon the

allegations of unjust detention by which the law was first brought into existence, but upon the thousand and one condemnations of the management of the hospitals for the insane which are heard among the people at large.

HOW THE HOSPITAL IS SUPPORTED.

The following financial exposition is the same that was published in the annual report for 1882-83, with the exception of changes necessary for its adaptation to present circumstances.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board-bills of its patients, and the small sum of ten dollars each for the funeral expenses of State patients who die in the hospital, and whose remains are not removed for burial. The receipts from the last-mentioned source during the past year were only thirty dollars.

For the entire support of State patients, including clothing and all loss from breakage and other kinds of destruction, the hospital received \$3.50 each per week from the treasury of the Commonwealth, from April 1, 1870, to April 1, 1879. For one year after the latter date it received but \$3 each per week; and since April 1, 1880, it has received \$3.25 each per week. This is the compensation fixed by statute law. One hundred and fifty-four, or more than one-third of the inmates, now belong to this class. During the past year the weekly average of them was 33.54 per cent. of the whole.

For town patients it has received, and now receives, from the treasuries of the towns respectively in which these patients have legal settlements, the same sum per week (\$3 25 each) as from the State treasury for State patients; but the towns clothe their patients, and remunerate the hospital for damages done by them. Two hundred and fifty-two, or more than one-half, of the inmates are now in this class. The weekly average of them for the year was 54 per cent. of the whole.

For private patients there is no uniform price. The

average pay from all who were here Sept. 30, 1884, was \$5.19 each per week. Clothing and damages are extra charges. The weekly average of these patients during the past year was a fraction over 12 per cent., or not quite one-eighth of the whole.

The average weekly pay, per capita, charged by the hospital for all its patients—State, town and private—in the course of the year is \$3.496. Such are the pecuniary resources of the institution. We turn to the results of

THE FINANCE OF THE LAST NINETEEN YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its favor. Between that time and the first of June, 1867, it received a direct bonus from the State of \$5,000, in two appropriations, for specific purposes, — one of \$2,000 and the other of \$3,000.

As an offset to the \$5,000 bonus, the hospital has purchased and paid for several lots of land, amounting to about one hundred and fifty acres, together with four dwelling-houses. The total cost of this real estate was \$30,183. The State then has, in this way alone, been overpaid for its bonus, in the sum of \$25,183.

The amount paid by the hospital for repairs and improvements in the course of the nineteen years, from Sept. 30, 1865 to Sept. 30, 1884, is \$223,268.40.

The surplus of cash assets now on hand, including the reserve fund, is \$25,002.03, or \$24,699.99 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing now on hand, are estimated to have cost \$15,445.23. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$12,945.23.

The value of household furniture in the hospital is, at a low estimate, at least \$10,000 greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called \$8,000. Collecting these several sums the account of debit

of the Commonwealth to the hospital appears to be as follows:—

Excess of c	ost o	f land	076	er dir	ect bo	nus,	, .		\$25,183	00
Repairs and	l imp	rover	nen	ts,					223,268	40
Excess of p										
Increase of	prov	risions	and	d sup	plies,				12,945	23
Increase of	furn	iture,		•	•		•		8,000	00
Total,				•					\$294,096	62

The necessary current repairs of the buildings may be estimated at \$3,000 annually. Deducting this sum for each of the nineteen years since Sept. 30, 1865, a total of \$57,000, there is a remainder of \$237,096.62. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

In the preparation of this summary, we have taken into account only the actual disbursements of money by the hospital in contributing to its own improvements. But aside from this, a large amount of work, in effecting those improvements, was performed by the teams of horses and cattle belonging to the institution and by the regular corps of its employees. Agreeably to all correct business principles, as well as to the custom at some similar institutions, the hospital should be credited with the amount of the value of this labor. But no credit has ever been given for it. Many thousands of dollars might, in this direction, be justly added to the sum above mentioned as the product of the efforts of the hospital in the promotion of its own material progress.

In connection with the above exposition, it may be interesting to know to what extent the tax-payers of the State have contributed to the institution. From a list, furnished by the State treasurer, of all the appropriations made either for the construction, the repairs, or the improvements of the hospital, I find that, from the time of the passage of the act authorizing its erection down to the present day, it has cost the people of the Commonwealth only three hundred and seventy-five thousand five hundred and fifty dollars (\$375,550).

ACKNOWLEDGMENTS.

The inmates of the hospitals would present their thanks to Miss C. E. Butterworth for a large quantity of religious newspapers, and to Miss Florence Austin for a collection of newspapers, pictures and many other New Year's presents to patients in the department for women.

We are also indebted to Dr. T. W. Meekins for the exhibitions of pictures with the stereopticon, and to Miss Longley, Mr. John Prince and Capt. David Hill for an entertainment consisting of vocal and instrumental music by the first two, and readings by the last.

All of the officers of the institution at the beginning of the official year are still upon duty; but of the subordinate officers, the baker, Charles Egen, and the laundress, Minnie J. Howes, have left, and their places have been filled by George B. Walker and Ida D. Hyde. It has been a very busy year with us, and all who, whether as officers or as employees, were here at its beginning and still continue at their posts, have lent a faithful hand in the performance of the duties assigned to them.

And here, as the curtain drops upon the stage of time, and the scene of another year passes from our view forever, I would once more acknowledge my recognition and appreciation of the ready counsel and the willing support which I have at all times received from the members of your Board.

PLINY EARLE.

NORTHAMPTON, Oct. 9, 1884.

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APPENDIX.

2.* Monthly Admissions, Discharges and Averages.

MONTHS.	AD	M18810	ns.	DISCHARGES (including Deaths.)			DAILY AVERAGE OF PATIENTS IN THE HOUSE.				
	Ма.	Fe.	Tot	Ma,	Fe.	ToL.	Ma.	Fe.	Tot.		
1888.				·							
October,	8	5	8	5	6	11	229.09	239.54	468.64		
November,	10	6	16	9	11	20	229.16	237.	466.16		
December,	9	6	15	7	4	11	229.55	233.64	463.19		
1884.											
January,	4	7	11	8	8	11	231.55	232 51	464.06		
February,	5	8	13	7	4	11	231.07	236.58	467.65		
March,	4	10	14	5	6	11	231.52	289 82	470.84		
April,	1	4	5	5 8 7	10	18	225.4	238 4	463.8		
May,	7	6	13	7	6	13	220.9	236.81	457.71		
June,	3	6	9	8 6	7	10	221.73	235.43	457.16		
July,	6	4	10	6	4	10		233 77			
August,	6	3	9	1	6	7	225.74				
September,	3	10	13	1	8	9	228.63	233.50	462.13		
Total of cases, .	61	75	136	62	80	142	_	_			
Total of persons,	59	72	131 -	62	78	140	-	-	_		
Daily average for							007.15	005.00	1 + 400 05		
the year,	-	-	_	-	_	-	227.15	235.90	†‡ 463.05		

3. Received on First and Subsequent Admissions.

WWW.nnn An					CAI	ses Admit	red.	Times Previoualy Recovered.			
NUMBER OF	THI	E ADMI	8810	N.	Males.	Females.	Total.	Males.	Females.	Total.	
First, .		•			35	58	93	_	_		
Second,					17	12	29	4	4	8	
Third, .					4	2	6	-	2	2	
Fourth, .					_	1	1	-	1	1	
Fifth, .					1	- 1	1	2	-	2	
Sixth, .		•			_	1 1	1	_	_	_	
Eleventh,					1	- 1	1	4	- 1	4	
Fourteenth,		•	•		-	1	1	-	10	10	
Total of	ca.	868.			58	75	133	10	17	27	
		rsons,			56	72	128	6	8	14	

^{*} For Table No. 1, see the beginning of the Superintendent's report.

[†] These totals were obtained by a division of the sums of daily residence for the year by 866, the number of days in the year.

[†] Three men admitted, 8 men and 1 woman discharged, as not insane, are not included in the following tables.

4. Ages of Persons Admitted for the First Time.

AGES.		AT F	IRST ATTA	CK OF	WHEN ADMITTED.			
AGES.		Males.	Females.	Total.	Males.	Females.	Total.	
Congenital,		_	_	_	_	_	_	
Fifteen years and less,.	. i	1	1	2	1	1	2	
From 15 to 20 years, .	.	3	6	9	2	3	5	
20 to 25 years, .	· i	4	1 4	8	4	6	10	
25 to 30 years, .	.	2	11	13	4	12	16	
30 to 35 years, .	.	5	1 1	6	5	1	6	
35 to 40 years.	. '	2	7	9	2	9	11	
40 to 50 years, .	. 1	4	9	13	7	13	20	
50 to 60 years, .	. 1	2	5	7	5	5	10	
60 to 70 years, .	.	-	4	4	2	3	5	
70 to 80 years, .	.	1	-	1	2	5	7	
Over 80 years, .	.	_	- 1	-	1	-	1	
Unknown,	\cdot	11	10	21	-	-	-	
Total of persons, .	·	35	58	93	35	58	93	

5. Parentage of Persons Admitted.

DT . CDC CD .				MA	LES.	Fun	ALES.	TOTALS.		
PLACES OF	NAT	IVIT Y. 	_	Father.	Mother.	Father.	Mother.	Father.	Mother.	
Maine, .		•		. 1	1	_	1	1	2	
New Hampshire	١,			1	2	2	1	8	3 6	
Vermont, .				3	2	_	4	8	6	
Massachusetts.				11	13	17	15	28	28	
Rhode Island,					- 1	1		1	_	
Connecticut,				7	5	5	5	12	10	
New York, .				3	4	1	2	4	6	
Pennsylvania,				-	1	ļ <u> </u>		_	i	
Illinois, .				1	_	_	_	1	_	
Canada, .				3	2	1	1	4	8	
England, .		•		$\tilde{2}$	1	2	2	4	3	
Ireland		·		13	13	35	34	48	47	
Scotland, .		-		' ī	i	_		1 1	i i	
Wales, .	:	•	·	ī	ī	_	_	Ī	l i	
France, .	•	•	•	i Î	ī	l _		1 -	l î	
Germany, .	·	•	Ċ	4	4	-1	. 1	5	5	
Austria, .	•	•	•	· -		i	ī	1	ĭ	
Italy,	•	·	•	! _	_	2	2	2	2	
Unknown, .	•	•	•	5	5	4	รื	9	8	
CIMEROME, .	•	•	•						<u> </u>	
Total of per	807	18, .	•	56	56	72	72	128	128	

6. Residence of Persons Admitted.

PLA	CES.					Males.	Females.	Total.
Hampshire County,					.	6	20	26
Hampden County,					. i	31	30	61
Berkshire County,					.	12	14	26
Franklin County, .						6	7	13
Worcester County,		•			.	1	1	2
Total of persons,						56	72	128
Cities or large towns,*					.	27	36	68
Country districts, .		•	•	•		29	36	65
Total of persons,					.	56	72	128

^{*} Containing not less than 10,000 inhabitants.

7. Civil Condition of Persons Admitted.

NUMBER OF	Ux	MARRIED.		3	farrie	D.	W	/IDOW	ED.	Dr	VORC	ED.
THE ADMISSION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
First,	16	18	34	17	27	44	2	13	15		5	2
Second,	7	4	11	9	3	12	-	3	3	-	-	-
Third,	2	_	2	1	1	2	i - 1	-		- 1	-	-
Fourth,	-	_	l – i	-	1	1	. –	_		\rightarrow	-	-
Fifth,	-	-	-	-	_	-	1	-	1	-	-	-
Sixth,	-	_	-	i -	1	1		_	-	-	-	-
Eleventh, .	1	_	1 :	' -	-		-	-	- '	-	-	-
Fourteenth, .	-	1	1 !	-	-	-	-	-	-	4		-
Total of per-	26	23	49	27	33	60	3	16	19	4.5		-

8. Occupations of Persons Admitted.

OCCUPATIONS.	Males.	. Occupations.	Females
School teacher,	 1 1 1 1 1 2 1 1 2 1 1 2 1 5 13 5 5 6	Housekeeper, Seamstress, Book-binder's wife, Railroad conductor's wife, Farmer's wife, Engineer's wife, Carpenter's wife, Carpenter's wife, Painter's wife, Shoemaker's wife, Blacksmith's wife, Mill operative, Mill operative, Mill operative's wife, Barber's wife, Barber's wife, Farmer's daughter, Carpenter's daughter, Fireman's daughter, Fireman's daughter, Peddler, Magnetic doctor,	1 1 4 2 1 2 1 1 1 1 1 8 2 1 1 1 1 9 3 1 1 1 4 1
		Magnetic doctor,	1 2 8
		Total of persons, .	72

9. Reported Duration of Insanity before Last Admission.

PREVIOUS DURATION.		ADMIE BOH BL			MISSION			TOTALS	•
PAEVIOUS DURATION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital,	_	-	_	_	_	-	_	_	_
Under 1 month,	1	8	4		_	-	ì	3	4
From 1 to 3 months,	14	12	26	-	_	l - l	14	12	26
3 to 6 months,		7	10	_	_	_	8	7	10
6 to 12 months,	3 2 4 2	10	13	3	1	4	6	11	17
1 to 2 years, .	2		10	3 3 4 6	_	4 3 8	5	8	18
2 to 5 years, .	4	5	9	4	4	8	8	9	17
5 to 10 years,	2	Š	5	6	4	10	8	7	15
10 to 20 years,	_	8 5 3 2	5 2	3	6	9	8	8	ii
Over 20 years,	l _	ī	l ī	3	Ιĭ		8	2	5
Unknown,	6	7	13	ĭ	i	4 2	7	8	15
Total cases, .	35	58	93	23	17	40	58	75	133
Total persons, .	85	58	93	22	16	38	56	72	128
Average of known	Year.	Year.	Year.	Year.	Year.	Year.	Year.	Year.	Year.
cases,	111	2.9	280	8#	1011	911	4 2	487	4 5 2

10. Form of Disease in the Cases Admitted.

FORM OF	DIS	EASE.				Males.	Females.	Total.
Mania,					.	42	41	83
epileptic, .					.	1	4	5
Melancholia,						11	17	28
Dementia,						2	8	10
senile, .						-	1 1	1
epileptic,					. !	2	1 8	5
None given,	•	•	•	•		-	1	1
Total of cases,						58	75	138
Total of persons,						56	72	128

[•] In this division of the table the whole period of time, from the first attack to the last admission, is indicated. Two patients are repeated, being twice re-admissions, and three are included who are in the first division, they having been admitted for the first and second times within the year.

11. Probable Causes of Insanity in Persons Admitted.

	C▲1	J SES	•				Males.	Females.	Total.
	Phi	sica	 l.						
Ill-health, .							4	16	20
Intemperance,						.	11	1	12
Overwork, .							6	6	12
Epilepsy, .						.	3	5	8
							1	i - I	1
Paralysis, .							-	1 1	1
Malaria,						. 1	_	1 1	1
Masturbation.						. !	7	_	7
Injury of head,							3	1 1	4
Injury,							2	_	2
Spermatorrhœa,				-	-	.	2 1	_	1
Puerperal, .	•	•	•	·		.	_	3	3
Change of life,	•	•	•	•	•	: 1	_	4	4
Old age, .	•	•	•	•	•	:	_	4	4
old ago, .	•	•	•	•	•	•			
Total of phys	sical,		•		•		38	42	80
	Me	ntal.				İ		,	
Business trouble,							2	-	2
Domestic trouble	,					.	_	4	4
Trouble, .	•				•		-	8	3
Disappointment,						. 1	_	1	1
Disappointment, Disappointment i	n lov	e.					1	_	1
Loss of friends.							1	- 1	1
Religious exciten							_	1	ĩ
Fright,		·		·			_	ī	ī
	:			٠		:	-	ī	ĩ
Hard study, .							4	11	15
Hard study, .	tal.								
Hard study, . Total of men			•	•	•	- 1	38		80
Hard study, .	sical,			:	:		38 14	42 19	80 3 3

12. Relation to Hospitals of the Persons Admitted.

·	Males.	Females.	Total.
Never before in any hospital,	31	55	86
Former inmates of this hospital,	17	13	80
Former inmates of other hospitals in this State,	1	1	2
Former inmates of this hospital and of other hospitals in this State,	1	-	1
Former inmates of hospitals in other States,	2	2	4
Former imates of this hospital and of hospitals in other States,	2	1	3
Former inmates of this hospital, of other hospitals in this State, and of hospitals in other States,	1	-	1
Former inmates of foreign hospitals (Germany),	1	-	1
Total of persons,	56	72	128

13. Discharges Classified by Admission and Result.

						BKG	Височивър.	<u>.</u>	MUCH	MUCH IMPROVED.	VED.	Ä	IMPROVED.	<u> </u>	Ü	Unimeroved.	ė		DIKD.			TOTAL.	
	ADM	ADMISSION.	_		<u>'</u>	Males.	Females.	Total.	Males.	Females.	.LatoT	Males.	Females.	.latoT	.solaM	Females.	Total.	Males.	Femalos.	Total.	Males.	Females.	JasoT
First, .	•	•	•	•	•	∞	14	22	4	30	12	Ξ	16	27	2	13	23	10	91	82	43	19	104
Second, .	•	•	•	•	•	-	-	63	-	တ	4	တ	တ	9	9	9	12	81	85	2	13	16	59
Third, .	•	•	•	•	•	1	<u> </u>	1	-	ı	-	-	ı	-	ı	1	1	•	1	1	87	ı	67
Sixth,	•	•	•	•	•	1	1	ı	ı	ı	ı	•	ī	ı	1	-	-	1	ı	ı	1	-	1
Eleventh, .	•	•	•	•	•	ı	ı	1	1	ı	ı	-	1	-	ı	1	1	1	1	1	н	1	
Fourteenth,	•	•	•	•	•	ı	-	-	١	ı	1	ł	1	ı	1	ī	1	1	1	1	1	-	1
Total of cases.	f case	ž.	•	•	•	6	91	22	8	11	17	16	19	33	16	ಜ	ဆွ	12	133	25	69	79	138
Total of persons,	f per	,500	•	•	•	1	ı	ı	1	1	ı	1	t	1	1	ı	1	١	ı	ı	69	22	136

14. How Sup	ported.
-------------	---------

		PATII	XTS ADMI	TTED.	WERELT	AVERAGE OF	THE YEAR.
SUPPORTED AS		Males.	Females.	Total.	Males.	Females.	Total.
State patients, .		16	18	84	83.37	71.73	155.10
Town patients, .	•	32	48	80	113.88	137.35	251.29
Private patients,		13	9	22	29.87	26.19	56.06
Total of cases,		61	75	136	227.15	235.90	*462.89

^{*} This weekly average is 64-100 less than the daily average, 463.06.

15. Cases Discharged Recovered - Duration.

PERIOD.		TION I	exfore on.	1	COSPIT.			LE DURA	
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Under 1 month,	5	-	5	2	1	8	-	-	-
From 1 to 3 months, .	2	9	11	6	6	12	6	4	10
8 to 6 months,.	2	2	4	-	2	2	2	4	6
6 to 12 months, .	-	2	2	1	4	5	1	8	4
1 to 2 years, .	_	3	8	-	2	2	-	2	2
2 to 5 years, .	-	-	-	-	1	1	-	3	8
5 to 10 years, .	-	-	-	-	-	-	-	-	_
10 to 20 years, .	-	-	-	-	-	-	-	-	_
Over 20 years,	-	-	-	-	-	-	-	-	-
Unknown,	-	-	-	-	-	-	-	-	-
Total of cases,	9	16	25	9	16	25	9	16	25
Total of persons,	9	16	25	9	16	25	9	16	25
Average of known cases (in months),	17	6	438	28	7	5-8-	83	11]	8,7

16. Cases Resulting in Death - Duration.

PERIOD.	1	LESING.	epore on.	1	Hospita		11	LE DUR	
	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Congenital,	_	_	-	_	_	_	_	_	_
Under 1 month,	4	_	4	1	_	1	_	_	_
From 1 to 3 months, .	4	1	5	2 2	l –	2	2	l _	9
3 to 6 months,	l ī	1 1	2	2	2	4	2 2	_	2 2
6 to 12 months,			2	-	1 -	1 -	lī	_	i ī
1 to 2 years,	1	8	2 2 4 3 3	2	1	3	i	1	
O to E moome	1	9	Q	ĩ	1	2	î	3	2 4 6 5 2
5 to 10 years, .		3	9	3	3	6	3	3	1 2
10 4- 00		, ,		1			1		
		-	-	1 -	4	5	1	4	0
Over 20 years,		-	=	-	2	2	-	2	Z
Unknown,	2	_	2	_	_	-	1		1
Total,	12	13	25	12	13	25	12	13	25
Average of known cases	,			1	1				
(in months),	34	37.4	2217	40.	116	7935	4319	148 ₁ 4	10011

17. Cases Discharged by Recovery or Death.

				3	LECOVERIE	g.		DEATES.	
FORM OF IN	BAN:	ITY.		Males.	Females.	Total.	Males.	Females.	Total.
Mania,	•			6	13	19	4	9	13
paretic, epileptic,		•		-	-	-	1	-	1
epileptic,	•	:		-	-	-	l -	1	1
	•	•	•	8	8	6	6	2	8
Dementia,	•	•	•	-	-	-	1	-	1
epilept	ic,	•	•	-	-	-	-	1 1	1
Total, .	•	•	•	9	16	25·	12	13	25

18. Causes of Death.

	C4	uses.					Males.	Females.	Total.
Nervous system,	_								
Epilepsy,		•		•			-	1	1
Paresis, .							1	- 1	1
Paralysis,				•	•		-	8 1	8
Progressive	para	llysis,	, .				_	1	1
Organic disc	ease	of th	e brя	ιίn,			2 1	- 1	3 1 2 1
Exhaustion	of ac	eute n	aania	۱, ،	٠.		1	-	1
Exhaustion	of c	hroni	e ins	anity,	•	•	1	-	1
Circulatory, —						1			
Disease of t	he h	eart,				-	_	1	1
Respiratory, —									
Phthisis, .							2	4	6
Pneumonia.							2 1	ī	6 2
Pleurisy,	•	•	•	•			1	-	L
Digestive, —							:		
Hepatitis,	,	•					-	1	1
General,—									
Old age, .							-	1	1
Accidental,—							,		
Saicide, .							8	-	8

19. Deuths, Classified by Results of Previous Admissions.

NUMBER OF THE		BECOVERED.	ED.	Mor	MUCH IMPROVED.	ď		IMPROVED.		à	UNIMPROVED.			TOTAL.	
ADMISSION.	Males.	Fomales.	Males. Fomales, Total.	Males.	Males. Females. Total.		Males.	Females	Total.	Males.	Females.	Total.	Males.	Males, Females Total. Males. Females. Total. Males. Females Total.	Total.
Second,	-	'	1	-	1		ı			١	63	83	87	န	20
Totals,		,	-	-		-		-	-	•	23	Q1	63	တ	9

20. Recoveries, Classified by Results of Previous Admissions.

NUMBER OF THE	OF TE	1		RECOVERED.	å	M.CC	MUCH IMPROVED.	Ģ	I	IMPROVED.		Q Q	UNIMPROVED.	6		TOTAL.	
ADMISSION.	SION.		Males.	Males, Females. Total. Males. Females. Total. Males. Females. Total. Males. Females. Total. Males. Females. Total.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Second, . Fourteenth,			- 1		81	1	1 1	- 1	1 1	1 1	11	1)	1)	1 1	64 1		æ - 1
Total, .		. •	-	63	တ	-	1	-		,	•	'	1		24	67	4

* In all cases of more than one admission, the classification is based upon the result of the admission next preceding the last, in cath case respectively.

21. Deaths, Classified by Duration of Insanity and of Treatment.

PERIOD.		FIRST A			Known Pa	
12402.	Males.	Females.	Total.	Males.	Females.	Total.
Congenital,	-	_	_	_	_	_
Under 1 month,	-	-	-	1	-	1
From 1 to 3 months,	2	-	2	1 2 2	-	2
3 to 6 months,	2 2 1	- 1	2 2 1	2	2	4
6 to 12 months,	1	-		_	-	-
1 to 2 years,	1	1	2 4 3 6	2	1	3 2 5 6 2
2 to 5 years,	1	3 2 4 2	4	1	1	2
5 to 10 years,	1	2	8	3	2 5	5
10 to 20 years,	2	4	6	1		6
Over 20 years,	1	2	8 2	-	2	2
Unknown,	1	1	2	-	-	-
Totals,	12	13	25	12	13	25
Average of known cases (in						
months),	771	153	116 <u>18</u>	3911	118 18	8018

22. Ages of those who Died.

AGES.		AT TIME	OF FIRST	ATTACK.	AT T	ine of Di	HTH.
2026.		Males.	Females.	Total.	Males.	Females.	Total.
Fifteen years and less, .		_	1	1	_	_	_
From 15 to 20 years, .	•	-	1	1	-	-	_
20 to 25 years, .		-	1	1	_	1	1
25 to 30 years.		2 2	-	2	1	-	1
30 to 35 years, .		2	1	2 3	1	2	3
35 to 40 years, .		1	-	1	2	_	2
40 to 50 years, .		1 3	2	1 5	2	5	7
50 to 60 years,		1	_	1	2 2 2	2	4
60 to 70 years, .		_	1	1	i -	1	ī
70 to 80 years, .		1	_	1	4	2	6
Over 80 years,		_	_	_	_	_	_
Unknown,	•	2	6	8	-	-	-
Totals,		12	13	25	12	13	25

23. Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1884.

NEW CASES (First Admissions).	DISCHARGED AND DIED IN 1883-84.	RED. MUCH IMPROVED. IMPROVED. DIED.	Total. Females. Total. Females. Fomales. Total. Total. Total. Total. Total. Total.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						1 1 1 1 1 1 1 1									
		RECOVERED.	Females.	1	1	<u> </u>	, ,	·	1	1	1	,	1	1	1	,	·	,	_ - -
			.solaM	,			'	·	'		_	'			1			,	<u>'</u>
		å	LatoT	228	88	157	104	76	113	65	109	118	==	125	136	183	181	168	158
		ADMITTED.	Femalos.	129	46	91	46	43	22	8	33	25	69	7	. 6	103	8 8	85	69
		•	Males.	66	42	99	28	51	99	સ	54	99	42	24	7.5	8	93	88	68
		YEARS.		1858, 2 months, .	1858-59,	1859-60,	1860-61,	1861-62.	1862-63,		1864-65,			18:7-68,	1868–69,	1869-70,	○ 1870–71, · · ·	Q 1871-72,	1872-73,

	ı	63	ł	-	1	1	_	_	4	တ	8
-	1	81	ı	ı	1	1	ı	-	_	1	10
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•	,	1	ı	ī	1	1	ı	1	_	2	8
155	123	126	110	25	88	26	97	105	117	95	3,298
69	62	63	55	5	#	47	49	52	25	83	1,663
88	61	y.	35	8	49	20	48	20	65	37	1,635
•	•	•	•	•	•	•	•	-	-	•	•
	•										6
1873-74,	1874-75,	1875-76,	1876-77,	1877-78,	1878-79,	1879-80,	1880-81,	1881-82,	1882-83,	1883-84,	Totale

23. Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1884 — Concluded.

							RE-A	PTIMO	RE-ADMITTED CASES.	ASES	,										
								ğ	9CHARG	ED AXI	DIED	DISCHARGED AND DIED IN 1868-84.	18-84					A S	ADMISSIONS, SEPT. 30,	P. EACH YE B. SEPT.	Y BAR'S
TEARS.		ADKITTED.		RKC	RECOVERED.		MUCH IMPROVED.	MPROV	ED.	INF	IMPROVED.		UNIND	UNIMPROVED.		DI	DIKD.	.	ė		
	Males.	Females.	JatoT	Males.	Females.	Total.	Malest	Females.	.letoT	Males.	Pemales.	.latoT	Malos.	Females.	,latoT	Males.	Females.	Total.		Females.	Total
1858, 2 months.		'	1	1	1	1	1	1	1	-	1	-	-		<u> </u>	-					16
1858-59.	4	_	2	1	ı	ı	1	ı	,	1	ı	1	,	ı	_	1	1		2	1	Ø
1859-60,	7	တ	10	ı	1	1	1	1	1	1	ı	1	-	1	-	1	_		တ	8	•
1860-61,	13	2	20	1	1	1	ı	ı	ı	1	ı	1	1	-	-	1	_		တ	-	4
1861-62,	13	2	18	1	ı	ı	1	ı	1	1	1	ı	1	-	_	-	_	_	_		6 3
1862-63,	17	11	22	ı	1	1	1	1	1	<u> </u>	1	1	1	1	_	1	_	_	_	နာ	4
1863-64.	13	15	27	1	ı	ı	<u>_</u>	1	1	<u> </u>	ı	ı	_	1	_	_	_	_	_	_	Q
1864-65,	16	6	25	١	1	ı	1	1	1	1	1	1	1	-	1	_	1	_	4	_	ð
1865-66.	6	6	18	ı	ı	1	,	ı	1	1	1	1	1	1	-	1	1	-	2	_	9
1866-67.	19	90	22	1	ī	ı	١	1	1	ı	1	1	1	<u> </u>	-	1	_	-	8	<u>.</u>	2
1867-68,	7	13	27	ı	ı	ı	ı	ı	1	ı	-	-	1	1	1	_	-	1	တ	87	40
1868-69,	12	22	æ	ı	١	1	ı	ı	1	1	1	1	1	ı	1	1	1	1	9	2	1
1869-70	10	6	19	ı	1	ī	ı	,	1	1	1	1	-	1	-	1	<u> </u>		4	2	6
1870-71,	16	14	စ္တ	1	ı	1	1	ı	ı	1	1	ı	1	1	_	1	_	_	_	10	٥ <u>.</u>
1871-72,	18	33	31	1	1	١	ı	1	1	1	1	1	1	1	,	1	1		9	6	15
187.9-78	1.9	Ξ	2,	1	-	-		_	_			-		_	-		_	_	•	t	6

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• • • • • • • • • • • • • • • • • • • •	ls,
1873-74, 1874-75, 1875-76, 1876-77, 1877-78, 1877-78, 1877-79, 1870-80, 1880-81, 1881-82, 1883-83,	Totals,

One woman, admitted in 1882-83, and discharged not insane, this year, does not appear in this table.

21. Relapsed Cases admitted in each year, and Discharged in 1883-84.

				CASI	28 PR	EVIOU	CASES PREVIOUSLY RECOVERED IN	RECOV	ERED		HIS H	THIS HOSPITAL.	بز							
								DISC	TARGED	Aro D	IED IN	Discharged and Died in 1882-84.	4					BEN	REMAINING SEPT. 30, 1884.	SEPT.
TEARS.	•	ADMITTED.		RECK	RECOVERED.	==	MUCH IMPROVED.	(PROVE	<u> </u>	IMPROVED.	VRD.	5	UNIMPROVED.	7KD.		DIED.				
	Males.	Females.	JaioT	Males.	Females.	.latoT	Males.	Femalos.	JaioT (Males. Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total	Males.	Females.	Total.
1858, 2 months,	1	ı	1	1		1	1	<u> </u>				1		- 1	ı	1	1	1	1	ı
1858–59,	2	1	63	ı	1	_	1	<u> </u>	<u>.</u>	1	1		1	1	1	ı	•	1	1	ı
1859-60,	9	ı	9	ı	1	1	1	•	-	<u>'</u>	1	_	1	1	1	1	1	1	ı	ı
1860-61,	∞	2	15	ı	•	1	1	1	<u> </u>	<u>'</u>	1 -	!		1	1	ı	1	1	ı	. 1
1861-62,	9	64	œ	ı	1	ı	1	,	-	1	1	-	1	1	ı	١	ı	1	ı	1
1862-63,	•	o o	13	•	1	1	1	1	-	- -	1	1	1	1	1	1	1	1	ı	1
1863-64,	9	9	16	1	1	1	1	<u>.</u>	-	<u>'</u> 	<u> </u>	I.	1	1	1	ı	1	1	1	1
1864-65,	œ	4	12	1	1	1	1	<u>.</u>	-	' -	!		1	ł	ı	1	ı	ı	ı	i
□ 1865-66, · · ·	4	တ	7	1	1	1	1	<u>.</u>	_	<u>'</u>	1	ı ==	١	1	ı	1	ı	ı	1	ı
1866-67, · · ·	==	9	17	1	1	1	,	-	_	<u>'</u>	<u>'</u>	•	ı	1	1	- 1	ı	1	ı	ı
1867-68,	∞	~	15	1	•	1	1	•	_	<u>'</u>	<u>ا</u> -	-	1	ı	ı	1	ı	1	1	1
1868-69, · · ·	9	6	15	1	1	1	1	· •	_	<u>'</u>	<u> </u>	-	1	1	9	1	ı	1	1	ı
1869-70,	••	4	6	1	1	1	1	· •	_	-	<u>'</u>	ı —	ı	1	ı	1	1	١	ı	1
1870-71,	2	9	11	1	1	1	•	· •	_	1	<u>'</u>	•	ı	ı	ı	•	1	1	1	ı
1871-72,	∞	9	14	1	1	-	•	•	_	<u>'</u>	<u> </u>	1	1	1	ı	1	1	ı	1	1
1872-73,	9	\$	11	ı	1	1	,	· •	_	1	·	1	1	ı	1	ı	1	1	١	ı
1873-74	2	00	15	ı	1	1	1	· •	_	' '	<u>'</u>	-	1	,	ı	١	ı	1	1	-
○ 1874-75,	24	2	-	1	1	=	_	· -	- -	' -	<u>'</u>	ا =	1	ī	ī —	ı	ı	ı	_	-

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1876–76, 1876–77, 1877–78, 1878–79	1879-80, 1880-81, 1881-82, 1882-83,	Totals

25. Clussed Average of Patients.

OFFICIAL	YEAR	•	State Patients.	Town Patients.	Private Patients.	Total
Monthly 2	Averag	e.				
1864-65, .			225.10	48.16	69.83	313.28
1865–66,	•		252.16	50.58	75.58	378.3
Weekly A	lverag	e.			1	
1866-67,			261.96	49.46	89 75	401.17
1867-68, .			262.65	47.92	103.06	41369
1868-69, .			248.52	54.98	101.46	404.96
1869-70, .			286.19	65.04	107.23	4(18.4)
1870-71,	•		234.10	77.07	118.38	429.56
1871-72, .			226 96	89.57	112.27	428.80
1872-73, .			248.02	99.23	90.00	437.2
1873-74, .			284.48	102.88	82.06	469.4
1874-75, .			274.35	128.34	72.46	475.1
1875-76, .			259.19	146.02	68.94	474.1
1876-77, .			254.84	161.58	60.02	476.4
1877-78			2 11.90	175.71	54 75	442.3
1878-79, .			200.34	182.29	54.23	436.80
1879-80, .			197.03	198.01	55.46	450.50
1880-81.			180.82	214.15	57.19	452.1
1881-82,			166.84	238.25	56.52	461.6
1882-83,			161.62	247.63	57 58	4668
1883-84.			155.10	251.23	56.06	462 3

26. Monthly Consumption of Gas.

	MO	NTH	8.				Cubic Feet.	Daily Average
	1	883.						
October,						.	41,350	1,333.87
November,						. !	44,950	1,498.33
December,	•		•	•	•	•	45,050	1,453.22
	1	884.				ł		
January,						.	43,750	1,411.29
February,						.	85,650	1,229.31
March, .				•		.	31,900	1,029.03
April, .							25,050	835.
May, .		•					16,650	537.09
June, .	-	•					12,200	406.66
July,			•			. 1	12,850	414.51
August, .				•			17,750	572.58
September,	•	•	•		•		27,900	930.
Totals,							855,050	970.08

[•] Daily average for the year.

1883–84.
Year
for the
Departments
Several D
for the
Supplies

27.

Lanterna.	1111	188111188111111	œ
Forks.		111111111111111111111111111111111111111	ដ
Knives.	01111111	111110110111411	88
Syrup Cups.	111111	116116111611111	4
	0000		
Pitebera.	11118111		32
Bowls.	1101010	1 121 6120 1 61 681 6	8
Mugs.	110122211	180100111111111111	8
Tumblers.	සිජිය 1 සස	14.81.1.180.1881	82
Saucers.	8220,800,	. 124 o 2 2 1 1 1 1 1 1 8 1 1	2.7
Cups.	8552010100	515140081	176
Plates.	12 18 15 18 12 12	30 112 18 18 18 18 18 18 18 18 18 18 18 18 18	8
Carpet Strips.	186461111	10-1048 I-8 IO 18B	8
Comps.	184636150	10048821-2222	158
Hair Brushes.	114101-1-00	111111111111111	13
Mirrors.	-11111	Hellelellelel	6
Chambers.	988 98 \$15 5 E	811210842508111	88
Ewers.	81111111	8-11-1-111111	7
Wash-bowls.	10111111	!!!!*!-!!!	13
Curtains.	127748171	10441111011-1-1	92
Towels.	128 186 182	129 - 1 6 128 128 128 128 128 128 128 128 128 128	88
Pillow-ticks.	11141111		8
Bed-ticks.	140-175281	1-045401-1-0111	60
Rubber Speets.	111011110	14-1-1-601601101	88
Blankets.	84 1 1 8 8 1 1 1 G	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	156
Bed-spreads.	110411011	01-04-111101111-1	42
Pillow-cases.	882288288	4482222450 8 7 - 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	283
Sheets.	000400100	4742223850 8 2 8 1 1 8 8 2 2 2 2 2 2 2 2 2 2 2 2 2	
=100.48			379
		.	
	Halls Halls Halls		
	Men's Departmet 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 3d and 4th Hall, 3d and 3d and 4th Hall, 3d and 3d and 4th Hall, 3d and 3d and 4th Hall, 3d and 3d and 4th Hall, 3d and	Women's Departs or 1st Hall, 3d Hall, 3d Hall, 4th Hall, dle 1st Hall, 3d Hall, 3d Hall, 4th Hall, 4th Hall, 1th Hall, 4th Hall, 1th Hall, 1th Hall, 1th Hall, 1th Hall, 1th Hall, 1th Hall, 1th Hall, 1th Hall, 1th Hall,	•
	's D Hall Hall Hall Hall Hall	Women's Dey Upper 1st Hall, 2d Hall, 3d Hall, 4th Hall, 3d Hall, 3d Hall, 4th Hall, Lower 1st Hall, 2d Hall, 3d Hall, Kitchen, Rest, Centre,	Aggregate,
	Se le Se le	2d 2d 4th 4th 2d 3d 3d 4th 4th 2d 3d 3d 4th 4th 7th 1st 7th 1s	88 TE
	ipper liddl	Wow Upper 1s 20, 20, 20, 20, 20, 20, 20, 20, 20, 20,	4
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	Rubber Chambers.	11011-100	11111111111
	Papers Pins.	- 101 - 1 1 10	104 104 00 10 10 10 10 10 10 10 10 10 10 10 10
	Papers Needles.	11-11111	100410010401111 8
	Skeins J.inen Thread.	1111111	1111111111111
	Spools Thread.	۵۱۱۵۱۱۵	121 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
d.	Shoe-brushes.	-1-101-01-	111111111111111
lude	Blacking.	9 27 11 12 14 14	111111111111111111111111111111111111111
onc	Spittoons.	111188781	11111111111
0	Palle.	HH 1HH8 1H4	
84	Mops.	1148641-6	18111481481184
83	Dust-pans.	111170111	1111101111111
. 18	Serub-brushes.	8121213	111144111111111111111111111111111111111
rear	Dust-brushes.	8 1 1 1 6 7 8 8	8
he]	Whisks.	888181144	14111411411180
or t	Brooms.	26122233350	71 138 137 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Supplies for the Several Departments for the Year 1883–84 — Concluded.	Soap, pounds.	82888888	88 88 88 88 88 88 88 88 88 88 88 88 88
rtm	.anisad-daaW	1111111	1-111111111-0
eba	Bollers.	12 12 6 12 13 6	121 121 121 121 121 121 121 121 121 121
I D	Disp-towels.	5,525,4852	121 10 10 1148
aero	Iron Spoons.	101024	24 28 36 36 36 36 36 36 36 36 36 36 36 36 36
Se a	Tin Cups.	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 2 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2
r th	Tin Plates.	111101111	1 121 1 1 1 1 1 1 1 1 1 1 8 1 1 8
જુ	Napkins.	8 1 1 1 1 1 1 1	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 X
plie	Table-spreads.	m	0100
Sup	Glass Casters.	911111814	HIII401HII0111
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27.			
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		Men's L 2d Ha 2d Ha 3d and 3d an 2d Ha 3d an 3d an 3d and 3d and 3d and	Women's D Upper 1st Hall, 2d Hall, 8d Hall, 8d Hall, 4th Hall Middle 1st Hall 3d Hall, 2d Hall, 2d Hall, 3d Hall, 8d Ha
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			CERT L E G

MONTHS.	FARM.		Kitchen	•	SEWING- ROOM.		LAUNDRY	,
	Men.	Men.	Women.	Total.	Women.	Men.	Women.	Total,
1888.				İ		,		
October, .	967	124	254	378	157	56	580	486
November, .	784	120	230	350	140	51	353	40-
December, .	678	124	237	861	158	51	374	428
1884.		}						
January, .	529	124	240	364	152	48	387	438
February, .	439	116	223	. 839	138	49	852	401
March,	461	124	242	366 .	171	51	374	428
April, .	642	120	235	355	154	52	364	416
May,	941	124	219	343	145	54	875	429
June,	1,107	120	242	362	152	50	338	3 88
July,	1,194	124	226	350	156	54	873	427
August, .	919	124	248	367	168	52	355	407
September, .	885	120	240	360	174	52	392	444
Totals, .	9,541	1,464	2,831	4,295	1,860	620	4,417	5,087

28. Days' Work by Patients.

The patients whose work is recorded in this table, were employed as many hours in the day as were the employees in each of the several departments respectively. The total number of days' work is 20,733, to which may be added 1,100 days, by men, in the mattress room, making an aggregate of 21,833 days. The number is larger, by more than five hundred, than in any preceding year. No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler room, and the carpenter's shop. A large amount of other work is done, both in the halls, and, at irregular times, out of them.

29. List of Articles made in the Sewing-Room.

Dresses, .				340	Straw-ticks,	121
Waists, .		•	•	16	Pillow-ticks,	24
Chemises, .				249	Bed-spreads hemmed,	42
Drawers, .			•	83	Curtains,	83
Skirts, .				136	Napkins hemmed, .	50
Sacques, .				4	Table-cloths,	14
Night-dresses,				29	Dish-towels,	376
Hats trimmed,				83	Dish-towels hemmed,	107
Shirts, .				325	Roller-towels,	168
Suspenders, pai	irs,			199	Bathing-towels, .	41
Collars, .				158	Carpets made,	7
Aprons, .				179	Carpet-strips hemmed,	76
Camisoles, .				7	Clothes-bags,	3
Sheets, .				450	Bureau spreads, .	12
Pillow-cases,				564	Cushions,	3
Bolster-cases,				42	Pants,	8
Mattress-ticks,	•	•	•	4 9	Articles repaired, .	29,105

30. Upholstery done in the Year.

Hair mattresses made, new materials, .		•		35
Hair mattresses made, new ticks,				33
Hair mattresses overhauled, hair repicked,				39
New husk underbeds made, new materials,		•		34
Old underbed ticks filled with new husks,				118
Hair pillows made, new materials,		•		28
Old pillow-ticks filled with new hair, .				13
Hair pillows overhauled, hair repicked, .		•		39

31. Annual Cost of Gas.

	YE	AR.				Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860-61, .						\$2,030 39	814.26	\$ 6 46
1861-62, .						2,085 29	813.80	6 64
18 63- 63, .				•		2,109 02	855.63	5 93
1863-64, .		•				2,069 79	857.63	5 78
1864-65, .		•	•			1,653 05	342.40	4 82
1865–66, .	•	•	•			1,107 98	376.35	2 94
1866-67, .		•		•		1,056 16	401.03	2 63
1867–68, .			•			1,022 51	413.41	2 47
1868-69, .			•		•	903 92	405.10	2 28
1869-70, .	•	•	•			915 30	408.83	2 28
1870-71, .	•					1,043 99	421.90	2 47
1871–72, .		,				980 94	428.72	2 28
1872-73, .						1,006 61	437.23	2 30
1878-74, .	•					1,066 74	469.54	2 2
187 4- 75, .	•					1,012 63	475 85	2 13
1875-76, .						1,089 82	474.21	2 29
1876–77, .			•			1,033 59	476.16	2 17
1877-78, .						1,066 02	412.43	2 4
1878-79, .						1,033 05	436.73	2 3
1879-80, .						945 00	450.51	2 1
1880-81, .		٠.				949 65	451.79	2 1
1881-82, .						919 13	461.66	200
1882-83, .						992 10	466.76	2 1
1883-84, .						1,081 55	463.05	2 2

The hospital has always been supplied with gas by the Northampton Gas Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. Since that time it has been but \$3.00, including meter-rent, and during the last two years with a discount of 5 per cent.

32. Trustees of the Northampton Lunatic Hospital.

NAMB.	Residence.	When app'ted.	Service ended.	From what cause.
Charles E. Forbes,* .	Northampton, .	1856	1857	Term expired.
Lucien C. Boynton, .	Uxbridge, .· .	1856	1858	
Eliphalet Trask, .	Springfield,	1856	1875	64 64
John C. Russell,* .	Great Barrington,	1856	1859	Resigned.
Horace Lyman, .	Greenfield,	1856	1857	Removed.
Charles Smith,	Northampton, .	1857	1860	Resigned.
Luther V. Bell,* .	Somerville,	1857	1859	. 44
Zebina L. Raymond,*	Greenfield,	1858	1859	44
Franklin Ripley,* .	Greenfield,	1859	1860	Died in office
Edward Dickinson,*	Amherst,	1859	1864	Resigned.
Walter Laflin,* .	Pittsfield,	1859	1866	Term expired
Silas M. Smith, .	Northampton, .	1860	1863	4 4
Charles Allen,	Greenfield,	1860	1861	Resigned.
Alfred R. Field,* .	Greenfield,	1861	1864	44
Edward Hitchcock, .	Amherst,	1863	1879	66
Silas M. Smith, .	Northampton, .	1864	-	Still in office
Edmund H. Sawyer,*	Easthampton, .	1864	1879	Died in office.
Henry L. Sabin,* .	Williamstown, .	1866	1876	Term expired.
Adams C. Deane, .	Greenfield,	1875	-	Still in office.
Henry W. Taft, .	Pittsfield,	1876	-	66 U
William M. Gaylord,	Northampton, .	1879	1883	Term expired.
Lyman D. James, .	Williamsburg, .	1879	_	Still in office.
Christop'r C. Merritt,	Springfield,	1883	-	86 66
Sarah A. Woodworth,	Chicopee,	1884	-	ec 64
Sarah M. Butler, .	Northampton, .	1884	-	16 46

^{*} Deceased.

33. Officers and Employees. Time employed, March 1, 1884.

Pliny Earle, M. D., Superintendent, 19 7 26 Edward B. Nims, M. D., Ass't Supt. 15 2 14 Daniel Pickard, M. D., 1st Ass't Physician, 6 10 22 David G. Hall, M. D., 2d Ass't Physician, 1 8 13 Walter B. Welton, Clerk, 18 - 14 John Mercler, Farmer, 16 8 - 14 John Mercler, Farmer, 16 8 - 14 John Mercler, Farmer, 10 10 11 Lucy A. Gilbert, Supervisor, 10 10 11 Lucy A. Gilbert, Supervisor, 17 - 18 F. Josephus Rice, Steward, 25 4 24 Mary Ward, Seamstress, 13 6 3 William Timothy, Baker, - 1 11 Frances C. Earle, Assistant Clerk, 11 11 Frances C. Earle, Assistant Supervisor, 5 5 24 Gertrude C. Arnold, Assistant Seamstress, - 5 - 26 Wictoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 1 11 5 William J. Douglass, Attendant, 1 11 5 Wyron O. Barnard, Attendant, 1 11 5 Myron O. Barnard, Attendant, 1 17 James J. Douglass, Attendant, 1 17 James J. Douglass, Attendant, - 8 10 John Keating, Attendant, - 9 10 John Keating, Attendant, - 6 18 Walter W. Burnham, Attendant, - 6 18 Walter W. Burnham, Attendant, 7 4 29 Melvin G. Overlock, Attendant, 5 4 13 Sames F. Poor, Attendant, 5 4 13 Sames F. Poor, Attendant, 5 4 13 Sames Modonald, Attendant, 5 4 13 Sames Modonald, Attendant, 5 4 13 Sames Modonald, Attendant, 5 4 13 Sames Modolie, Attendant, 5 4 13 Sames Modolie, Attendant, 5 4 13 Sames Modolie, Attendant, 5 4 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, Attendant, 5 5 5 Same Modolie, At	NAME.	Years.	Months.	Days.
Edward B. Nims, M. D., Ass't Sup't, 16 2 14 Daniel Pickard, M. D., 1st Ass't Physician, 6 10 22 10 David G. Hall, M. D., 2d Ass't Physician, 1 8 13 Walter B. Welton, Clerk, 18 — 14 John Mercler, Farmer, 16 8 — 15 Danford Morse, Engineer, 19 — 7 7 Robert H. Gallivan, Supervisor, 10 10 10 11 Lucy A. Gilbert, Supervisor, 17 — 18 F. Josephus Rice, Steward, 25 4 24 Mary Ward, Seamstress, 13 6 3 William Timothy, Baker, — 1 11 Frances C. Earle, Assistant Clerk, 11 11 6 Minnie J. Guilfoil, Assistant Supervisor, 5 24 Gertrude C. Arnold, Assistant Seamstress, — 5 — 6 Minnie J. Howes, Laundress, 5 — 26 Victoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 1 11 5 William J. Douglass, Attendant, 1 11 5 William J. Douglass, Attendant, 1 1 1 7 James J. Douglass, Attendant, 1 1 1 1 7 James J. Douglass, Attendant, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pliny Earle M. D. Superintendent	10	7	26
Daniel Pickard, M. D., 1st Ass't Physician, 6 10 22 David G. Hall, M. D., 2d Ass't Physician, 1 8 13 Walter B. Welton, Clerk, 18 - 14 John Mercier, Farmer, 16 8 - Danford Morse, Engineer, 19 - 7 Robert H. Gallivan, Supervisor, 10 10 11 Lucy A. Gilbert, Supervisor, 17 - 18 F. Josephus Rice, Steward, 25 4 24 Mary Ward, Seamstress, 13 6 3 William Timothy, Baker, - 1 11 Frances C. Earle, Assistant Clerk, 11 11 6 Minnie J. Guilfoil, Assistant Supervisor, 5 5 24 Gertrude C. Arnold, Assistant Supervisor, 5 5 24 Gertrude C. Arnold, Assistant Supervisor, 5 5 24 Gertrude C. Arnold, Assistant Supervisor, 5 5 24 Gertrude C. Arnold, Assistant Supervisor, 5 5 24 <				
David G. Hall, M. D., 2d Ass't Physician,	Daniel Pickard M D 1st Asa't Physician			
Walter B. Welton, Clerk, John Mercier, Farmer, 16 16 8 - 14 John Mercier, Farmer, 16 8 - 16 8 - 7 Robert H. Gallivan, Supervisor, 10 10 11 1 10 10 11 1 10 10 11 11 17 - 18 - 7 Robert H. Gallivan, Supervisor, 10 25 4 24 4 424 4 4 424 4 424 4 4 424 4 4 424 4 <t< td=""><td>David G. Hall M I) 2d Asa't Physician</td><td>_</td><td></td><td></td></t<>	David G. Hall M I) 2d Asa't Physician	_		
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Danford Morse, Engineer, 19			l s	1
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Lucy A. Gilbert, Supervisor, 17	Robert H. Gallivan Supervisor		10	
F. Josephus Rice, Steward, Mary Ward, Seamstress, William Timothy, Baker, Frances C. Earle, Assistant Clerk, Minnie J. Guilfoil, Assistant Supervisor, Gertrude C. Arnold, Assistant Supervisor, Gertrude C. Arnold, Assistant Samstress, Minnie J. Howes, Laundress, Victoria S. Pillinger, Assistant Laundress, Forward Connors, Attendant, Henry W. Estey, Attendant, William J. Douglass, Attendant, John L. Howard, Attendant, John L. Howard, Attendant, Thomas Kelly, Attendant, Thomas Kelly, Attendant, Thomas Kelly, Attendant, John Keating, Attendant, Walter W. Burnham, Attendant, Melvin G. Overlock, Attendant, Frank Holdrige, Attendant, Jane McGuire, Attendant, Cécile Riel, Attendant, Thane McGuire, Attendant, Secondant, Thomas F. Poor, Attendant, Cécile Riel, Attendant, Thomas Kelly, Attendant, Cécile Riel, Attendant, The Actendant Actendant, The Actendant Actendant, The Acte	Lucy A. Gilbert, Supervisor.		1 -	1
Mary Ward, Seamstress, 13 6 3 William Timothy, Baker, - 1 11 Frances C. Earle, Assistant Clerk, 11 11 6 Minnie J. Guilfoil, Assistant Supervisor, 5 5 24 Gertrude C. Arnold, Assistant Seamstress, - 5 - 26 Wictoria S. Pillinger, Assistant Laundress, 5 - 26 Victoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 2 8 9 Henry W. Estey, Attendant, 1 11 5 William J. Douglass, Attendant, 1 11 8 23 Myron O. Barnard, Attendant, 1 1 17 13 18 23 Myron O. Barnard, Attendant, 1 1 1 17 11 18 23 18 19 10 11 18 11 11 11 13 11 17 13 18 18 10 10 10 10 10 10 10 10 10 10 10	F. Josephus Rice, Steward.		4	
William Timothy, Baker, - 1 11 Frances C. Earle, Assistant Clerk, 11 11 6 Minnie J. Guilfoil, Assistant Supervisor, 5 24 Gertrude C. Arnold, Assistant Seamstress, - 5 - Minnie J. Howes, Laundress, 5 - 26 Victoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 1 11 5 Henry W. Estey, Attendant, 1 11 5 William J. Douglass, Attendant, 1 1 8 23 Myron O. Barnard, Attendant, 1 1 1 7 James J. Douglass, Attendant, 1 1 1 7 James Kelly, Attendant, - 1 1 1 17 John Keating, Attendant, - - 9 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 11 <td< td=""><td></td><td></td><td></td><td></td></td<>				
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Minnie J. Guilfoil, Assistant Supervisor, 5 24 Gertrude C. Arnold, Assistant Seamstress, - 5 - Minnie J. Howes, Laundress, 5 - 26 Victoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 1 11 5 Henry W. Estey, Attendant, 1 11 5 William J. Douglass, Attendant, 1 1 11 3 John L. Howard, Attendant, 1 1 1 7 3 1 1 1 1 1 7 4 23 Myron O. Barnard, Attendant, 1				
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Minnie J. Howes, Laundress, 5 — 26 Victoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 2 8 9 Henry W. Estey, Attendant, 1 11 5 William J. Douglass, Attendant, 1 11 3 John L. Howard, Attendant, 1 1 17 James J. Douglass, Attendant, 1 1 17 James J. Douglass, Attendant, - 11 18 Frank Skelly, Attendant, - 11 18 Frank Lawson, Attendant, - 11 18 Frank Lawson, Attendant, - 9 10 John Keating, Attendant, - 6 18 Walter W. Burnham, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 4 29 Melvin G. Overlock, Attendant, 16 1 7 Jane McGuire, Attendant, 8 10 3 Cécile Riel, Attendant, 8	Gertrude C. Arnold Assistant Seamstress			
Victoria S. Pillinger, Assistant Laundress, 7 8 9 Edward Connors, Attendant, 1 11 5 William J. Douglass, Attendant, 1 11 3 John L. Howard, Attendant, 1 1 1 3 John L. Howard, Attendant, 1 1 1 7 James J. Douglass, Attendant, 1 1 - 8 Thomas Kelly, Attendant, - 11 18 Frank Lawson, Attendant, - 1 1 - 8 John Keating, Attendant, - - 10 - 10 - - 10 - - 11 18 - </td <td>Minnie J. Howes, Laundress.</td> <td></td> <td> _</td> <td>26</td>	Minnie J. Howes, Laundress.		_	26
Edward Connors, Attendant, 2 8 9 Henry W. Estey, Attendant, 1 11 5 William J. Douglass, Attendant, 1 11 3 John L. Howard, Attendant, 1 1 17 James J. Douglass, Attendant, 1 1 17 James J. Douglass, Attendant, - 11 18 Frank Lawson, Attendant, - 11 18 Frank Lawson, Attendant, - 9 10 John Keating, Attendant, - 6 18 Walter W. Burnham, Attendant, - 6 18 Walter W. Burnham, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 1 25 Maria E. Graves, Attendant, - 1 25 Maria E. Graves, Attendant, 16 1 7 Jane McGuire, Attendant, 5 4 13 Naomi A. Griffin, Attendant, 5 4<	Victoria S. Pillinger Assistant Lanndress		8	
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William J. Douglass, Attendant, 1 11 8 23 John L. Howard, Attendant, 1 8 23 Myron O. Barnard, Attendant, 1 1 17 James J. Douglass, Attendant, 1 - 8 Thomas Kelly, Attendant, - 11 18 Frank Lawson, Attendant, - 9 10 John Keating, Attendant, - 6 18 Walter W. Burnham, Attendant, - 6 18 Walter W. Burnham, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 1 7 Melvin G. Overlock, Attendant, - 1 25 Maria E. Graves, Attendant, - 1 25 Maria E. Graves, Attendant, 16 1 7 Jane McGuire, Attendant, 8 10 3 Cécile Riel, Attendant, 5 4 13 Naomi A. Griffin, Attendant, 2 7 9 Philomène Goyette, Attendant, 1	Honey W Fator Attendant		-	
John L. Howard, Attendant, 1 8 28 Myron O. Barnard, Attendant, 1 1 17 James J. Douglass, Attendant, 1 - 8 Thomas Kelly, Attendant, - 11 18 Frank Lawson, Attendant, - 6 18 Walter W. Burnham, Attendant, - 6 18 Walter W. Burnham, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 3 1 Frank Holdrige, Attendant, - 3 1 Frank Holdrige, Attendant, - 1 25 Maria E. Graves, Attendant, 16 1 7 Jane McGuire, Attendant, 8 10 3 Cécile Riel, Attendant, 5 4 13 Naomi A. Griffin, Attendant, 2 7 9 Philomène Goyette, Attendant, 1 7 16 Sadie A. McNeill, Attendant, 1 2		_	7.7	
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James J. Douglass, Attendant, 1 - 8 Thomas Kelly, Attendant, - 11 18 Frank Lawson, Attendant, - 6 18 Walter W. Burnham, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 3 1 Frank Holdrige, Attendant, - 16 1 7 Maria E. Graves, Attendant, 16 1 7 4 23 Maria E. Graves, Attendant, 16 1 7 4 23 1 1 7 4 23 1 1 7 4 23 1 3 1 3 2 2 2 1 3 9 21 2 3 1 3 9 21 3 1 3 9 21 3 1 3 9 21 1 3 9 2 1 3 9 2 9 9 7 9 9 1 1 3 9 2 1 1 3 2 2 9	Myron O. Barnard Attendant			
Thomas Kelly, Attendant, - 11 18 Frank Lawson, Attendant, - 9 10 John Keating, Attendant, - 6 18 Walter W. Burnham, Attendant, - 4 29 Melvin G. Overlock, Attendant, - 3 1 Frank Holdrige, Attendant, - 1 25 Maria E. Graves, Attendant, 16 1 7 Jane McGuire, Attendant, 8 10 3 Cécile Riel, Attendant, 5 4 13 Naomi A. Griffin, Attendant, 5 4 13 Naomi A. Griffin, Attendant, 2 7 9 Philomène Goyette, Attendant, 2 7 9 Philomène Goyette, Attendant, 1 3 22 Céleste Goyette, Attendant, 1 3 22 Céleste Goyette, Attendant, 1 2 - Emma Moodie, Attendant, 1 2 - Mary Hall, Attendant, - 9 10 Jeanette McLean, Attendant, - 2 7	James J. Dongless Attendant			
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22	Hattie Gamwell Centre	_		
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33. Officers and Employees. - Concluded.

NAME.	Years.	Months.	Days.
Ida R. Howes, Centre,	. 4	6	18
Thomas C. Powers, Assistant Steward,	. 9	11	11
Matilda Day, Cook,	. 1 -	9	4
Nellie Clark, Assistant Cook,	. 6 2 . 1	- 1	27
Lillian M. Douglass, Assistant Cook, .	. 2	4	22
Lillian M. Ferry, Assistant Cook, .	. 1	5 8 5 2 9	3
Mary A. Carnes, Rear,	. -	8	_
William C. Hall, Assistant Engineer, .	. 18	5	17
Mishalas Diel Missha Tousinson	. 18 . 8 . 9 . 13	2	25
Walter E. Pillinger, Watchman,	. 9	9	29
Sifroi Belville, Carpenter,	. 13	10	7
Walter Tower, Carpenter,	. 7	3	_
Alfred Parenteau, Painter,	. 18	6	18
David Mercier, Coachman,	. 7	-	14
Benjamin Rockwell, Assistant Farmer,	. 16	9	==
Elson E. Howes, Assistant Farmer, .		11	23
Julius Freeman, Assistant Farmer, .	. 6 . 6	7	24
Henry Wilson, Assistant Farmer, .	. 4	10	8
James Madden, Assistant Farmer,] _	9	15
Eugene Sullivan, Assistant Farmer, .] _	9	15
James McClellan, Car Boy,	1 -	11	30

CHRONOLOGY.

- [N. B. The years are the calendar years, and not the official years of the hospital.]
- 1855. Legislative Act, authorizing the construction of the hospital by a board of three commissioners, approved by the Governor, May 21st.

Enos Clark lot bought, northeast corner of the farm; 24a.

Deed executed Sept. 3. This lot was conveyed back to Mr.

Clark and reconveyed to the Commonwealth, May 13, 1856.

William Parsons lot bought; 28a. 25r. Deed executed Sept. 4.

Samuel Day lot bought; 5a. 16r. Deed executed Sept. 4.

George Ellsworth's farm and buildings bought; 100a. 94r. Deed executed Sept. 5.

Samuel Phelps lot bought; 9a. 60r. Deed executed Sept. 6.

Silas D. Clark lot bought; 5a. 20r. Deed executed Sept. 6.

- 1856. Legislative Act, establishing a board of trustees, approved by the Governor, June 3.
 - July 4. Corner-stone laid.
 - July 4. First meeting of the board of trustees, at the Warner House.
- 1857. Oct. 1. Term of building commissioners expired.
 - Oct. 1. Trustees voted to proceed to complete the building.
- 1858. Feb. 19. By-laws, as reported by Mr. Boynton, adopted.

 August. Hospital opened.
- 1859. The hospital was at first supplied with water by Mr. Damon, from his pond on Mill River.
 - March 16. A break occurred at the west end of Mr. Damon's dam, destroying the water power. Water was brought in barrels, and pumped into the tank, until the twenty-fifth of the month.
- 1860. A high, wooden, picket fence built next the county road, from the farm house westward.

Foundation walls for the barn laid.

- A brick pump house, with boiler and pump, for forcing water to the hospital, was erected on the premises near Mr. Damon's dam. It stood until after water was taken from the public water works, and was then taken down.
- 1861. Five small lots of land bought, one-eighth of an acre each. Deed executed by William H. Prince, May 13.
 - July 81. The barn and the adjoining piggery are finished.

August 31. The coal-house is finished. This is the coal-house adjoining the boiler-room. Prior to its construction, a roadway, which was laid out around the whole building, passed over its site.

The bowling alley was crected this summer.

1862. The reservoir at the spring, southwest of the hospital, and on the premises, was made, and the adjoining pump house erected.

November. Cooking range and broiler put in the kitchen.

1863. March 31. The water works at the spring are in successful operation. The power was a caloric engine, taken on trial. Several breakages had occurred. There were others afterwards, and, on the 5th of August, it was voted not to accept the engine.

1864. A new steam forcing-pump put into the house at the spring.

The four original flue steam boilers taken out, and replaced by tubular ones.

All the pipes for the distribution of water throughout the house were taken down and cleaned out.

The roadway at the main entrance from the county road graded down. This entrance was closed in the spring of 1869. It was half-way down the hill, east of the present entrance.

1865. Mattress making by the patients introduced.

Storeroom for groceries and meats fitted up, and an outside door opening directly into it made.

A storeroom for charcoal made in the north basement.

A paint shop and a storeroom for vinegar and soap made in the south basement.

Partitions made at the foot of the stairways, and across the halls leading to the laundry and the sewing-room.

Coal-house at the railroad built.

A painter hired as a permanent employee.

Hill east of lower or main entrance partly graded down.

Peat meadow lot bought of W. C. Rice; 1a. 90r. Deed executed Sept. 19.

Vestibules to the superintendent's apartments, on the second and third floors, partitioned off from the rotunda, and doors made from them into the bath-rooms.

Began to grade down the bluff next the county road, between the farm-house and the lower entrance.

Philosophical and chemical apparatus bought.

Storeroom for sand made in basement.

A steam whistle put in, the sound of the bell not being sufficiently loud for all purposes.

New road made in front of the north wing. The original road was much nearer the building, and extended around the wing.

1866. Two iron water tanks put in north attic. All the original tanks were of wood.

Hay scales bought and put in place.

Chapel painted in water colors.

Doors put upon the staircases, between the third and fourth halls, both north and south.

An additional (fourth) steam boiler put in.

Iron settees put in the rotunda. Up to this time there had been no furniture, except the large boxes of plants, and no pictures in either of the three stories of the rotunda.

1867. Sewing-room doubled in size, and the dry-goods cases in it made.

Case made for philosophical apparatus.

New road finished across the lawn, in front of the south wing, and the old one closed.

Horse-chestnut trees set in front of the south wing.

Bath-rooms, lavatories, and water-closets of the south wing remodelled, and the ventilation improved.

Land for a depot for peat, or "meadow-muck," bought of William Foley; 80r. Deed executed June 18.

Carriage road made across west end of west meadow.

Floor of lower 3d hall, south, relaid. Nearly all of the hall floors were of maple, insufficiently seasoned. After this date, one or more of them was relaid every year, until 1877, when only one of the original floors of the twenty-four halls remained.

The brownstone piers, for a gateway at the upper entrance, were built.

1868. Iron gates at the main entrance put up, and the former main entrance closed.

Exchange of land with Samuel Day, reducing the number of boundary lines from five to two. Day's deed executed Sept. 30 (see Registry of Deeds, Book 255, p. 307).

The stone wall of the south barnyard built.

Book-case, lower rotunda, north side, made; also nearly fifty wardrobes.

1869. Piggery removed twenty-nine feet westwardly, its height to the eaves increased eighteen inches, and the shed connecting it to the barn erected.

The capacity of the coal-house at the railroad was doubled by an extension.

Grading of the bluff, next the county road, finished, and a wooden picket-fence made from the main entrance to the foot of the hill.

Samuel Parsons' lot, south of county road, bought; 7a., more or less. Deed executed June 5. See Registry of Deeds, Book 262, p. 253; see, also, Book 268, p. 327.

Curved iron fence at entrance gate put up.

Four additional cases, for books, etc., put into the rotundas.

New building, for laundry and other purposes, erected.

1870. New laundry put in operation in January. The old laundry was over the boiler-room and the engine-room.

A severe hail-storm, on the 20th of May, broke about five hundred panes of glass in the hospital building.

Barn remodelled. Cow stable changed from north to south side. The frame strengthened by larger timbers.

Carpenter's shop built on the walls of the coal-house. The old shop was in the basement of the south wing of the hospital.



Shop for engineer partitioned off from old laundry and carpenter's shop.

Screw-cutting and drill machines put in.

Two more iron water-tanks put in attic of north wing.

Gold's radiators put in the basement of the second sections of both wings.

Old clothes-drying room divided, making a room for the flatheater, and a lodging-room.

1871. Floor of old laundry, now lumber-drying room, relaid.

Cart shed built at the northwest corner of the bowling alley.

Original heating apparatus taken out of the basement of the south wing, the four air-chambers united into one, the track of the railroad changed, and Gold's radiators put in.

Began to take water of the Northampton Water Works Co. December 25.

1872. Old blacksmith's shop, under superintendent's office, fitted up as a storeroom for groceries.

Walls of upper 4th hall, south, painted in oil. Since that time the walls of all the patients' halls, dining-rooms and dormitories, have been similarly painted.

Floor of the middle rotunda relaid.

Sixteen fire hydrants placed in the wings, and four out of doors. Cart shed extended across west end of bowling alley.

Old folding-room of the laundry divided by a permanent partition, and an outside door, with platform and steps, made, furnishing apartments for the engineer and his family.

Basement of north wing remodelled, and new radiators put in, to correspond with that of the south wing, after the change in 1871.

Five forty-inch ventilators put upon the roof of the hospital.

Floor of the laundry folding-room relaid.

The walls of all the airing courts were erected and finished before November 1.

A large storeroom for apples fitted up in the basement of the south wing. In the original structure this room had no light, as there were no windows beneath the water table on the front of the building.

1873. Room opposite the sewing-room divided by a permanent partition, making a room for the seamstress, and another for storage.

The floors of twenty of the twenty-four halls have now been relaid.

The floor of the upper rotunda was relaid.

All the distributing-pipes for water were taken out and replaced by new ones, those for cold water being lined with cement.

Elevator from the folding-room to the sewing-room put in, and the laundry and the sewing-room connected by a narrow staircase.

Circular saw put in.

One hot-water tank, in the rotunda basement, taken out and replaced by a new one.

All the bath-rooms, lavatories, and water-closets of the north wing remodelled, with new floors and larger sinks.

Two of Wright's bucket-plunger steam-pumps put in.

The old clay pit, southeast of the hospital, on land received, in exchange, from Samuel Day, was filled by grading down the adjoining bluffs.

The subordinate office of steward was created.

New cooking apparatus, boiler excepted, put in.

Oven in bakery rebuilt.

1874. Clarke orchard bought; 15a. 79r. Deed executed May 15th.

Iron receiving tank put in the fourth story of the centre. The old tank was of wood, and sixteen feet in diameter.

A new steam cylinder affixed to the engine, increasing its power about one-third.

A ventilating pipe from the kitchen to the large chimney put in. Letter boxes put in the halls.

An additional board sheathing put upon all the cupolas.

The lumber house, west of the barn, finished in October. Its western section to be a poultry house.

The stone viaduct for the main sewer, in the west meadow, was finished in November.

1875. New and improved elevators made, and their walls sheathed.

A large bath-room in the basement of the 3d halls, north, was made.

A room for storage made, on north side of centre attic.

Oliver Edwards lot and dwelling, adjoining the S. Day lot, and near the foot-path entrance, bought. It contained about 25 square rods. Deed executed June 2d.

Smith and Prindle lot bought, with dwelling. It adjoined the Edwards lot on the west, and contained 23r. Deed executed June 5th.

The west half of the Samuel Day homestead land bought; 5a. 664r. Deed executed June 7th. This includes the sites of the brick-yard and saw-mill.

The four old steam boilers taken out, and replaced by three larger ones.

The south storeroom in centre attic was made.

A brick sewer, for surface water, down the hill southeast of the hospital, was made; length 436ft., including branch to north catch-basin.

A brick sewer for surface water was made down the hill southwest of the pump house; length 118ft.

he old water pipes from Mill River to the front portico, about 1,600 ft., were taken up, and replaced by new ones.

The lean-to, adjoining the barn on the west, was erected.

A brick sewer for surface water, and opening into Mill River, was made across the Samuel Day lot and the Samuel Day hom estead land; length about 570ft., calibre 2ft.

1876. A brick partition wall erected, from foundation to attic, between the bath-rooms and the small dormitories of the third halls south.

All the woodwork, including floors and joists, of the bath-rooms, lavatories, and water closets of the three second halls, south, was taken out, and the rooms rebuilt.

The floor of the ironing-room was relaid.

Ground graded near the entrance of the foot-path, from the county road, and a row of elm and maple trees set from the main entrance to the Samuel Day house, near the bridge.

The Samuel Day homestead bought; 5a. 99r. Deed executed June 22d.

The largest barn on the Day homestead was taken down, and set up near the barn at the hospital.

A brick sewer for surface water was made down the hill east of the east grove; length 275ft., calibre 18 inches.

An iron fence erected from the entrance gate, along the line of the road, to the southeast corner of the S. Day homestead lot.

The fountain in front of the house was set up, but not put in operation.

1877. The Enos Clark pasture, adjoining the hospital farm on the west, was bought; 90a. 45r. Deed executed February 9th.

The walls of the engine-house were raised three feet, and a new slated roof put on. The old roof was flat and tinned.

The embankment around the fountain was finished; and the fountain put in operation.

The original brick front portico, which had tried to tumble down for several years, was taken down and replaced by one of brownstone.

A part of the bank of Mill River, in the west meadow, was riprapped.

An iron fence was erected from the entrance gate along the road to the southwest corner of the farm, at the boundary of the land of John H. Fowle.

The John H. Fowle lot aforesaid was bought; 10a. 21r. Deed executed December 15th.

1878. Picket fence built across west boundary of farm, and along the county road, from the iron fence westward.

Ferris lot bought; 1½a., more or less. Deed executed April 4th.

An ice-house built at Mill River, a few feet north of the old one, which is still in use.

The stone wall of the north barnyard erected.

Hill and roadway graded on the south boundary of the Fowle lot, and the iron fence extended across part of the lot.

A concrete sidewalk laid from the entrance gate to the bridge at Mill River; and a similar walk from the entrance gate of the foot-path to the road at the top of the hill, on the front lawn.

A brick sewer for surface water put in on the south side of the county road, along the lower half of the hill. This sewer was extended to the top of the hill in 1879; calibre 2ft.

A brick sewer for surface water put in on the north side of the county road, from the main entrance nearly to the bottom of the hill; calibre 2ft.

The stonework of the bridge for a road into the west pasture, south of the paper mill, was built.

A severe freshet, on the 10th of December, carried away both icehouses.

1879. One ice-house rebuilt in January and filled.

Justin Thayer peat-land bought; about 42r. Deed executed April 5.

The E. E. Denniston peat-land bought; 2a., more or less. Deed executed June 18.

An iron fence erected on the south side of the county road, from the northwest corner of the Samuel Parsons lot to the foot of the hill. This required much grading of the adjoining bluff.

A row of elm trees set on the Parsons lot, near the iron fence.

A hurricane, on the 16th of July, blew down about fifty trees on the farm.

The brick horse-barn was extended ten feet northwardly, its walls raised three feet, and a new, slated roof put on. The old roof was flat, and tinned.

The W. B. Welton lot, adjoining the Parsons lot on the south, was bought; 5a. 17r. Deed executed October 6.

The knolls at the eastern boundary of the Parsons and Welton lots were graded, and about 500 cart-loads of clay taken from them, was spread upon the garden.

A brick building, for a scullery and a storeroom for charcoal, was erected.

About three hundred feet of the river bank, in the west meadow, was rip-rapped.

1880. A wire screen was put upon the balustrade of the rotunda stairs in April.

Norway spruce trees set between the elms, on the south side of the hill down the road.

The western division of the main sewer, north of the barn, rebuilt with brick.

The stone bridge for the road into the Enos Clark pasture was extended about twenty-two feet westwardly.

In the autumn, the knolls on the eastern boundary of the Parsons lot were further graded, the road along that boundary relaid by the county commissioners, and the iron fence extended along the line of the road.

An ice-house, near the hospital, was erected.

1881. A fire-pump put into the engine-room, a subterranean reservoir constructed, hydrants placed in the centre building, and all the pipes necessary for the successful working of the pump were laid.

Two sections of the river bank in west meadow, an aggregate of four hundred and sixty-five feet, were rip-rapped.

A road was laid out from the north grove to the northeast part of the farm, near the ice-house at the pond on Mill River.

Concrete walks were laid to the barn and the horse-barn; also between the rear building and the west outside door of the north wing.

78 LUNATIC HOSPITAL, NORTHAMPTON. [Oct.'84.

1882. A new road, more remote from the hospital than the old one, was made through the grove west and north of the building.

A road to the west meadow made near the pump-house.

Road graded west of the sand-pit, adjoining the Fowle lot.

Ansel Wright peat-land bought; 100r., more or less. Deed executed May 24.

Copper lightning-rods put upon the hospital and the barns.

A concrete sidewalk laid from the front door across the lawn.

An ice-pond made in the west (E. Clark) pasture.

A building erected over the reservoir at the pump-house.

1883. Telephone put in, in February.

The houses and lots of Hiram Day, Ellen M. Day, and S. C. Lacore were bought. Deeds executed February 2d. These lots are at the southeast corner of the farm, near the bridge.

The floor of the sewing-room was relaid.

The new road through the west and north grove was graded and finished.

The bowling alley was taken down, and an excavation for the cellar of a large building for workshops and storage was begun, in June. The excavation was continued, and more than one-half of the cellar wall built, when the work was necessarily suspended for the season.

One hundred feet of the eastern section of the main sewer, which was made of stone, and a part of which was under the site of the proposed building, was taken up, and replaced by a cylindrical one of brick.

A wood-house was made by an addition to the scullery and coalhouse.

A high wind, on the 28th of December, blew down the chimney of the pump-house.

1884. A new chimney, 65 feet 4 inches in height, was built at the pumphouse.

Granite gate-posts at the north barnyard set up in May.

A fire-proof building for oils, paints, etc., was built.

The Day barn was raised and extended westwardly, by an addition of 40 feet, and a cellar 120 feet long and 40 feet wide, made beneath the whole. A poultry-house, connected with this barn, was also erected.

An addition of 40 feet was made to the cart-shed.

Work on the cellar for the new building, on the former site of the bowling alley, was resumed in May. The building was subsequently erected, and so far finished that the cellar and the first story were used for storage in October.

The ice-house at the pond on Mill River was taken down, and set up at the ice-pond in the west pasture.

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HE OSPITAL FOR INBANE.

THIRTIETH ANNUAL REPORT

0P

THE TRUSTEES

OF THE

NORTHAMPTON LUNATIC HOSPITAL,

FOR THE

YEAR ENDING SEPTEMBER 30, 1885.

BOSTON:

WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.

1886.

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OFFICERS OF THE NORTHAMPTON LUNATIC HOSPITAL.

TRUSTEES.

HENRY W. TAFT, Esq., .					PITTSFIELD.
LYMAN D. JAMES, Esq., .					
HON. CHRISTOPHER C. MI	BRR	ITT,			SPRINGFIELD.
SILAS M. SMITH, Esq., .					NORTHAMPTON.
MRS. SARAH M. BUTLER,					NORTHAMPTON.
MRS. SARAH A. WOODWO	RTE	[, .			CHICOPEE.
ADAMS C. DEANE, M.D.,					GREENFIELD.

RESIDENT OFFICERS.

,			Superintendent.*
			Assistant Superintendent.
			FIRST ASSISTANT PHYSICIAN.
•			SECOND ASSISTANT PHYSICIAN.
			CLERK.
			FARMER.
			Engineer.
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	

TREASURER.

PLINY EARLE, .		•	•		•		•	Northampton.
		∩ æ "		ha II	and.	~1		

SUBORDINATE OFFICERS.

ROBERT H. GALLIVAN	,				MALE SUPERVISOR.
LUCY A. GILBERT, .					FEMALE SUPERVISOR.
F. JOSEPHUS RICE,					STEWARD.
MARY E. WARD, .					Seamstress.
IDA D. HYDE,				•	LAUNDRESS.
GEORGE B. WALKER,					BAKER.

^{*} On the det of October, 1885, Dr. Earle retired from office and was succeeded, both as Superintendent and Treasurer, by Dr. Edward B. Nims, the former Assistant Superintendent.

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Commonwealth of Massachusetts.

TRUSTEES' REPORT.

To His Excellency the Governor of the Commonwealth and the Honorable Council.

The fiscal year 1884-85 of the Northampton Lunatic Hospital having come to a close, the undersigned, in accordance with their duty as Trustees of that important charity, have the honor of hereby presenting to you the customary annual exposition of its operations.

Directing our attention primarily to the great objects for the attainment of which the institution was founded, namely, the custody, care and cure of the insane, the point most forcibly impressed upon us is the constant increase of the pressure upon the accommodations furnished by the hospital.

The building was designed for the accommodation of 250 patients. That number was not only attained, but exceeded, within twenty months from the time of its opening; and the duily average number for the second full official year, was 255. In the third year it rose to 314; in the ninth (1866-67), to 401; and in the nineteenth (1876-77), to 476. The opening of the new hospital at Worcester then gave us some relief, and the transfers to it reduced the daily average of resident patients to 442. Since that time there has been a constantly increasing annual average until it has now become within a small fraction of 476, or about the same as before the completion of the Worcester Hospital. Had there not been unusual exertions, during the past year, to procure the discharge of patients who might possibly be accommodated elsewhere, the number would have been still larger.

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This brief historical sketch would appear to imply a very convenient quality of elasticity in the apartments for patients; but, practically, twenty-inch brick walls do not readily yield to internal pressure, and when the enclosed room has received a proper and wholesome number of inmates, every additional occupant is an encroachment upon the convenience, the comfort, and the health of the whole.

We look forward to some relief when the hospital at Westborough is opened. It is possible, also, that, under the law enacted in June last, some of our patients may be domiciled as boarders in private dwellings. But it appears to us that the time has come at which the true measure of relief should be adopted, by the erection, upon the premises, of a building for recent cases, as suggested by Dr. Earle and approved by us, in the annual report for 1881-82. We respectfully recommend this proposition to your serious consideration.

At the begining of the fiscal year just closed, the number of patients in the house was, of men, 229; of women, 234; a total of 463. In the course of the year 66 men and 70 women, a total of 136, were admitted, making the aggregate number who were under the treatment or care of the institution during a part or the whole of that period, 599, of whom 295 were men and 304 women.

Sixty men and 63 women, a total of 123, were discharged from the hospital, and 16 men and 11 women, a total of 27, were released by death.

The number remaining in the hospital at the close of the official year was, of men, 235, and of women, 241; a total of 476. The whole daily average number resident was 475.94; being, for men, 233.47, and for women, 242.47. This number shows a considerable increase of patients in the course of the year, as it exceeds, by 12.89, the daily average for the official year 1883-84.

On the 30th day of May there were 490 patients in the house, being the largest number on any day within the year. Its opposite, or the least number on any day, was 457, on the 24th of October.

Of the 123 patients who left the hospital, the mental condition at the time of their discharge, as compared with the

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same at the time of their admission, was, recovered, in 29; much improved, in 9; improved, in 29; and unimproved, in 26; while 3 are reported as not insane. The proportion of recoveries is not absolutely or relatively large; but they who have attentively read the annual reports of this institution for the last ten years, will have learned not only not to expect great numerical results in respect to cures, but the reasons for not expecting them. The Superintendent has several times heretofore discussed the subject of curability. He returns to it again, in his report for the past year, to which we refer all persons who are interested either in that subject or any other of the many points connected with insanity and its treatment in public institutions.

It will be remembered that the warm season of 1884 was a very active and busy period at the hospital, in the construction of buildings which appeared necessary for the convenient and economical working of the institution and to meet the enlarged operations of its agricultural department. No new structures of the kind have been made this year; but considerable work has been done in finishing those of last year, and grading and otherwise improving the grounds around The large new cellar of the barn which was raised and extended last year, has proved to be a very convenient and valuable adjunct to the accommodations for the live stock of the farm. It has been improved, in the course of the summer, by a thick floor of concrete. The open court within the wings and the main edifice of the storehouse, and other spaces around that building, together with the pathway between it and the rear door of the hospital, have also been laid with similar concrete.

The cellar beneath the storehouse, which, as will be recollected, was intended for the storage of the vegetables to be consumed in the house, has proved successful beyond our expectations. As its upper space of three feet is above the surface of the outside grounds and is furnished with windows, there was some doubt that it would be sufficiently warm, in the coldest season, without artificial heat. Hence provision was made for the easy introduction of steam, should that become necessary. The winter was long and unusually cold, and consequently was a thorough test of the cellar's capabili-

11

ties in regard to temperature. It kept the mercury in the thermometer standing, almost as constantly as if it were immovable, at thirty-eight degrees of Fahrenheit; and at no time was it below thirty-six degrees. This is a range of temperature which, for the preservation of vegetables, could hardly be bettered. Artificial heat was not needed, and the unconsumed vegetables came out, in the spring, in far better condition than ever before at this hospital.

A pasture for factow cows and young cattle, within a convenient distance, having long been needed, we purchased one in June. It is about one and a half miles from the hospital, adjoining the highway to Easthampton, and contains a little more than twenty-three acres. This raised the quantity of land belonging to the institution to about three hundred and sixty-five acres.

Considerable expense has been laid out, this year, in the reclamation of rocky and wet places upon the farm, by the removal of the stone, and the laying of under-drains and culverts.

The hospital has earned, in the course of the year, by the charges for the board of its inmates, \$86,549.99. The sums charged for the three different classes of patients were as follows:—

For State patients,			•		\$26,201 04
town patients,					44,193 97
private patients,	•	•	•	•	16,154 98
Total.		_	_		86.549 99

That portion of the earnings which accrued during the last quarter of the year has not, of course, been paid, but will appear in the *income* of the next ensuing year.

The report of the Treasurer having been received and audited, is hereto appended. The balances of the accounts show, that on the 30th of September, 1885, the end of the official year, there were:—

The reserve fund, And cash assets available for fut		\$10,000 00 27,755 09
Total,		\$37,755 09
And liabilities (bills payable),		5,935 82
Balance in favor of the hospital.		\$31.819 27

Beides these ready assets, the institution has on hand the representatives of cash, in a quantity of *purchased* provisions and supplies, of which the estimated value is \$14,762.87, together with the hitherto unconsumed products of the tarm.

In pursuance of the Legislative Act of 1884, we appointed, in the early part of December of that year, Dr. Emily F. Wells to a position upon the medical staff of the hospital. She entered upon the duties of the office on the 1st of January of the current calendar year, and has hitherto performed them to our satisfaction. No other change was made, in the course of the official year, in the corps of executive officers. Of the subordinate officers, the seamstress, Miss Mary Ward, after long and faithful service, has left, and Gertrude C. Arnold has been appointed in her place.

At the present time of writing, the one important change in the administration of the hospital, since the date of our last report, is the retirement of Dr. Earle, whose resignation has finally been accepted by the Board; and, upon its acceptance, the following resolutions were unanimously adopted and entered upon the records:—

Resolved, That in accepting the resignation of Dr. Pliny Earle, Superintendent of this hospital, the Trustees have reluctantly yielded to the conviction that his advancing years and impaired health demand rest, and relief from the responsibilities and labors of his position.

Dr. Earle has been at the head of this institution twenty-one years, and, during nearly all that period, has also been its Treasurer. In its management he has combined the highest professional skill and acquirement with rare executive ability. By his thorough knowledge, his long experience, his patient attention to details; by his wisdom and firmness, his absolute fidelity to duty, and devotion to the interests of the hospital, he has rendered invaluable services to the institution, and to the community which it serves.

The Trustees are deeply sensible of the assistance which he has given them in the discharge of their duties, and follow him, in his retirement, with the assurance of their highest respect and esteem.

Resolved, That the Trustees indulge the hope that Dr. Earle will continue to make his home in this institution, that they may continue to profit by his counsels; and they will provide that his rooms shall always be open and ready for his use.

12 NORTHAMPTON LUNATIC HOSPITAL. [Oct.

The vacancy thus created has been filled by the election of Dr. Edward B. Nims to the office of Superintendent. Dr. Nims has been connected with the hospital nearly seventeen years, and from their knowledge of hischaracter and qualifications, the Trustees are confident that, under his superintendence, the efficient administration of the affairs of the hospital will be maintained.

Dr. Earle withdrew and Dr. Nims succeeded him in office, both as Superintendent and Treasurer, on the 1st of October, current, the beginning of the new official year.

HENRY W TAFT, LYMAN D. JAMES, CHRISTOPHER C. MERRITT, SILAS M. SMITH, SARAH M. BUTLER, SARAH A. WOODWORTH, ADAMS C. DEANE,

Trustees.

NORTHAMPTON, Oct. 8, 1885.

LIST OF PERSONS

REGULARLY EMPLOYED AT THE NORTHAMPTON LUNATIC HOSPITAL, SEPT. 30, 1885.*

Superintendent and physicia	n,				. per year,	\$2,50 0 00
Assistant superintendent and	phy	ysicia	n,		. "	1,500 00
First assistant physician,					. "	900 00
Second assistant physician,					. "	700 00
Third assistant physician,					. "	60 0 00
Treasurer,					. "	300 00
Treasurer, for clerk-hire and	pai	d to c	elerk,		. "	200 00
Clerk,	•				. "	1,200 00
Farmer,					. "	700 00
Engineer,					. "	· 900 00
Assistant clerk,					. per month,	20 00
Supervisor (male),					. "	40 00
Supervisor (female), .					. "	30 00
Assistant supervisor (female),				. "	20 00
Seamstress,				•	. "	20 00
Assistant seamstress, .					. "	14 00
Laundress,					66 -	18 00
Assistant laundress, .					. "	18 00
Assistant laundress, .			,		44	14 00
Baker,		•			• "	40 00
Steward,			•		. "	58 33
Assistant steward,					. "	35 00
Attendants (male) (7), .					. "	80 00
Attendant (male) (1), .					. "	28 00
					. "	25 00
Attendant (male) (1), .			•		. "	23 00
Attendants (male) (2), .					. "	21 00
Attendant (female) (1), .					. "	20 00
Attendants (female) (11),					. "	18 00
Attendant (female) (1),					. "	16 00
Attendant (female) (1), .	•				. "	15 00

^{*} On the 1st of October, 1885, the office of assistant superintendent was abolished, and the salary of the first assistant physician was placed at \$1,200.

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14 NORTHAMPTON LUNATIC HOSPITAL. [Oct

Attendants (female) (2	?),	•			•	per month,	\$14 00
Night-watch (female),	•					. "	18 00
Housework, centre (fer	nale)	(2),				. "	15 00
Cook (female),	-	•				. "	16 00
Assistant cook (male),						. 46	15 00
Assistant cooks (female	e) (2)).				. "	15 00
Assistant cook (female					•	. "	14 00
Farmers' dining-room						. "	15 00
Housework, rear build	•	-	e),			"	9 00
Watchman,	•		•			. "	3 0 00
Carpenter,						. per day,	2 25
Carpenter,							2 00
Painter,						. per month,	50 00
Assistant engineer, .						. "	82 00
Night engineer, and ga	rden	er in s	sum	mer,		. "	3 0 00
Coachman,						. "	28 00
Farm hands (5), .						. "	28 00
Farm hand (1),						. "	25 00
Farm hand (1), .	. '					. "	28 00

In the warm season we generally hire some farm hands by the day. This year we have four, at \$1.50 per day, without board. They work mostly on improvements of the farm.

INVENTORY OF STOCK AND SUPPLIES.

ON HAND SEPT. 30, 1885.

Live-stock on the	ne far	m, .									\$6,027	00
Produce of the	farm	on ha	nd,								8,411	08
Carriages and a	gricu	ltura	im	plem	ents,						3,590	00
Machinery and	mech	anica	l fix	ture	3,						8,820	00
Beds and beddi	ng in	inma	tes'	depa	rtme	nt,					12,530	00
Other furniture	in in	nates	' de	partr	nent,						4,850	00
Personal proper	rty of	State	in !	Supe	rinte	ndent	's de	parti	nent,	*	9,125	00
Ready-made cle	othing	ζ, .						•		;	2,259	72
Dry goods,											3,077	5 9
Provisions and	groce	ries,									3,092	56
Drugs and med	icines	i, .									625	00
Fuel,											5,408	00
Library, .											1,000	00
Paints and oils,									•		300	00
												_
Total,				•							\$69,115	00

^{*} This term is here applied to the whole of the central edifice or block, and includes all the offices, the kitchen, the bakery, the laundry, the sewing-room and other apartments.

TREASURER'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

I hereby present my report, as Treasurer of the hospital, for the fiscal year ending with the 30th of September, 1885. It contains, as usual, an appraisal of the property of the institution, an account of the receipts and the disbursements of money during the year, and the financial condition at its close.

A	88	ET	S.

Three hundre	d and si	xty-f	our ac	eres	of lan	ıd,	\$1	4,000	00		
Hospital build	ling, .	•					25	0,000	00		
Farm house,	82,000 ; 1	brick	house	e, \$ 2	,000,			4,000	00		
Three dwelling	ngs (H. I	Day 1	ot),					1,000	00		
Storehouse ar							1	6,000	00		
Two barns,								5,500	00		
Horse stable,								2,000	00		
Scullery and	wood-ho	use,						700	00		
Lumber-house	э, .						1	,200	00		
Pump-house,.	•						:	1,000	00		
Cart shed,								500	00		
Coal-house,								400	00		
Piggery,		٠.				•		200	00		
Fire-proof for								500	00		
Two ice-hous	es, .							600	00		_
	•										
	·									\$327,600	00
	·]	Perso)NAL	. Езт	ATE.				\$327,600	00
	plies on							nded	to	\$327,600	00
Stock and sup		han	d, as					nded	to	\$327,600 \$69,115	
Stock and sup	ees' repo	han ort,	d, as	per i		ory		nded :	to ·	•	95
Stock and sup	ees' repo	han ort,	d, as	per i	invent	ory		nded :	to ·	\$69, 115	95
Stock and sup	ees' repo	hand	d, as	per i	invent	ory		nded	to :	\$69,115 10,000	95 00
Stock and sup the Trust Reserve fund, Cash on hand	ees' repo	handert,	d, as	per i RECE	invent	:		nded	to .	\$69, 115	95 00 59
Stock and sup the Trust Reserve fund, Cash on hand Received fron	ees' repo Sept. 30 n the Sta	hand ort, 0, 188	d, as	per i RECE	invent	ory		nded	to :	\$69,115 10,000 \$1,765 26,028	95 00 59 29
Stock and sup the Trust Reserve fund, Cash on hand Received fron fron	ees' repo	handort,	d, as	per i RECE	invent	ory		nded	to	\$69,115 10,000 \$1,765	95 00 59 29 72
Stock and sup the Trust Reserve fund, Cash on hand Received fron fron	Sept. 30 the Sta	handort,), 188 ite tre	d, as	per i	invent		**************************************	nded :	to	\$69,115 10,000 \$1,765 26,028 46,787	95 00 59 29 72 43
Stock and sup the Trust Reserve fund, Cash on hand Received fron fron fron fron	Sept. 30 the State towns, individ	handort, 0, 188 ate tre	d, as	per i	invent		**************************************	nded .	to	\$69,115 10,000 \$1,765 26,028 46,787 15,819	95 00 59 29 72 43 75

PAYMENTS.

4.4	C-1	! !							000 795	
1st.		ies and labor,		•	•	•		•	\$28,725	05
2d.		sions and suppleats of all kinds		_		•c	OF 6	90		
		eaus of all kinds. sh of all kinds.		•	•	-	,056			
				•	•		,238			
		ruit and vegetat		•	•		,446 707			
		our,		•	•		,707 670			
	_	rain and meal for rain and meal fo		•	•		670			
				•	•		172			
		ea, coffee and cl	•	•	•		643			
		gar and molass		•	•	_	,999 			
		itter and cheese		•	•		716			
		lt and other gr		•	•	2	,830			
	A	l other provisio	ns, .	•	•		116	28	07.50	••
		1 *						_	25,597	
3d.		hing,		•	•	•	•	•	4,489	
4th.				. •	•	.•	•	•	7,168	
5th.		licines and med			•	•	•	•	1,701	
6th.		niture, beds and			•	•	•	•	2,719	
		nsportation and					•	•	353	
8th.		inary constructi					•	•	1,667	
9th.		raordinary cons	truction a	nd re	pairs,	•	•	•	8,766	
10th.		lestate, .	٠		•	•	•	•	700	92
11th.		cellaneous expe		uding	: —	_				
	1.	,	• •	•	•	-	785			
		Farm supplies		•	•		349			
	3.		• •	•	•		750			
•		Minor expens		•	•		696			
	5.			•	•		228			
	6.	Temporary lo	an, .	•	•	1,	500	00		
								_	8,309	41
	D-4-1 -							~	200 100	<u> </u>
,	LOCALE	xpenditures,	• •	•	•	•	•	•	\$90,199	04
			Liabii	ITIES	L					
	•				-				A 0.001	
		l wages due Oc		•	•	•	•	•	\$3,931	
Misce	ellanec	ous bills due,		•	•	•	•	•	2,004	17
								-	\$5,935	82
Due t	he ins	titution for boar	rd, Oct. 1.	1885.	_					
	rom S			•	•	\$6.8	842	03		_
_		owns,					944			•
		idividuals, .	•			•	279			
		terest,			•	•	100			
Dne f		reasurer, Sept.	80, 1885				589			
240 1		, ~~ p••	,,	•	-			_	\$27,755	15

18 NORTHAMPTON LUNATIC HOSPITAL. [Oct.

•		8	SUMM	ARY.						
Total receipts, .									\$94,789	09
Total payments, .									90,199	51
Cash on hand Sept. 3	0, 188	5,	•		•	•	•		\$ 1,589	55
Total liabilities, .									\$5,935	82
Total debts due the i	nstitut	tion,							27,755	15
Total expenditures, i	n olu di	ing n	ew b	uildi	ngs,	•			90,199	54
Dividing this sum by	475.94	, the	aver	ige n	umbe	er of j	patien	ts,		
we have the avera	ge exp	pendi	ture	per p	atien	t, .		•	\$ 189.	518
And the average wee	ekly e	xpend	liture	e per	patie	ent,	•	•	3.0	641
Deducting from the	total e	xpen	ditur	es,					\$20,199	54
The extraordinary ex									10,967	03
We have the cur	rrent e	expen	ses,	•					\$79,232	51
Dividing \$79,232.51 patients, we have the Making the average	ne ave	rage	expe	ndit	ire pe	er pa	tient,		\$166. 8:	475 201
Adding to the currer The decrease of pers									\$79,232 1	51 53
We have the ap	parent	nece	ssary	cost	for t	he y	ear,		\$79,234	04
Dividing \$79,234.04 tients, we have, as Making the average	the a	nnual	l cost	of e	ach p	atier	ıt, .	pa-	\$166. 3.	479 201

When making large disbursements for the construction of buildings, the Treasurer advanced, for fifteen days and without interest, the sum of fifteen hundred dollars on the hospital's account. This is entered as a temporary loan.

PLINY EARLE, Treasurer.

NORTHAMPTON, Oct. 8, 1885.

We have examined, as auditors, the accounts of the Treasurer, and found a satisactory voucher for every entry.

ADAMS C. DEANE. LYMAN D. JAMES.

NORTHAMPTON, Oct. 8, 1885.

SUPERINTENDENT'S REPORT.

To the Trustees of the Northampton Lunatic Hospital.

Seasons demand their specific labors, and days come to us laden with their incumbent duties. Another official year of this institution having elapsed, it devolves upon me once more to make the annual record, and to present for your information a summary of the most important events and circumstances which constitute its history.

The usual schedule of the numerical records which show the movement of the population of the hospital, and the results of treatment of its inmates is presented in the following table:—

-	~	~	1004 OF
1.	(teneral	Statistics.	1884-85.

	Males.	Females.	Totals.
Patients in hospital Oct. 1, 1884,	229	234	463
Admitted within the year,	66	70	136
Whole number of cases within the year, .	295	304	599
Discharged within the year,	60	63	123
Viz.: as recovered,	17	12	29
much improved,	4	5	9
improved,	12	17	29
unimproved,	10	16	26
mot indemo	10	2	3
Deaths,	16	11	27
Patients remaining Sept. 30, 1885,	235	241	476
Viz: supported as State patients.	83	74	157*
Viz: supported as State patients, town patients,	119	140	259
	33	27	
private patients,			60
Number of different persons within the year,	289	299	588
Persons admitted,	63	67	130
recovered,	17	12	29
Daily average number of patients,	233.47	242.47	475.94

^{*} On the 1st of October, 1895, two men and one woman were transferred from State to town charge. Hence the new year will begin with

State patients, 81 + 73 = 154. Town patients, 121 + 141 = 262.

At the beginning of the year there were 463 patients (persons) in the house, 229 of whom were men and 234 women. The number of patients admitted within the year was, of men, 66, and of women, 70; making a total of 136. Hence the whole number of patients in the house, in the course of the year, was 599, of whom 295 were men and 304 women.

Among the admissions were 3 men and 3 women, a total of 6, who were admitted twice each. The 6 persons, therefore, counted as twelve patients. By subtracting their last admissions the whole number of persons admitted is obtained. This was, of men, 63, and of women, 67; making a total of 130. But among these were 5 persons—3 men and 2 women—who were in the house at the beginning of the year, but who had been subsequently discharged and readmitted, within the year. By subtracting these, we find there were 60 men and 65 women, a total of 125, who were not in the house at the beginning of the year. Adding these to those who were here at the beginning of the year, we obtain the number of persons who were patients at any time in the course of the year. That number is 588, of whom 289 were men, and 299 women.

Of the 6 persons — 3 men and 3 women — who were admitted twice each, only one — a man — was discharged recovered on the first of those admissions. Of the 5 persons — 3 men and 2 women — who were here at the opening of the year, but were afterwards discharged and readmitted, no one was discharged recoverd.

Of the 130 persons admitted, not less than 34, of whom 12 are men and 22 women, have been inmates of the hospital more than once each. Eight men and 14 women have been admitted twice each; 2 men and 4 women, three times each; 1 man and 1 woman, four times; 2 women, five times; 1 man, twelve times; and 1 woman, sixteen times.

Of the 22 persons who have been admitted twice each, 1 man and 4 women were discharged recovered on their first admissions; 2 women were discharged much improved; 5 men and 5 women, improved; and 2 men and 3 women, unimproved.

Of the 6 who have been admitted three times each, 1 woman had been discharged recovered on both of her former

admissions; 1 man as much improved both times; 1 woman as improved both times; 2 women as improved once each and unimproved once each; and one man as unimproved both times.

Of the 2 who have been admitted four times each, both were discharged recovered, on each of their three former admissions.

Of the 2 women who have been admitted five times each, one was discharged recovered twice and improved twice; and the other as recovered once, much improved once, and improved twice.

The man who has been admitted twelve times, had been discharged recovered four times, much improved once, and improved six times; and the woman who has been admitted sixteen times, had been discharged recovered eleven times, much improved once, and improved three times. They were brother and sister. The latter was admitted twice within the year.

The whole number (136) of admissions was precisely the same as in the next foregoing year; but the number of persons admitted was not so large by one as in that year.

The largest number of patients in the house on any day within the year, was 490, on the 30th of May; and the smallest number on any day was 457, on the 24th of October.

The daily average number of patients resident in the hospital exceeded that of the next preceding year by but a small fraction less than 13.

STATUS OF PATIENTS.

Basing the discrimination upon the sources of support, the patients of this hospital are, for business purposes, divided into three classes, — State patients, town patients and private patients.

Of the 136 patients admitted in the course of the year, the expense of support of 43 was charged, when they entered the hospital, to the Commonwealth; that of 74 to cities and towns, and that of 19 to relatives, friends or guardians of the patients. The relative proportion of State patients was about 25 per cent. larger, and that of town and of private patients was smaller, than in the next preceding

year. Subsequently to admission, four changes were made in regard to responsibility for support. One ward of the State became a town charge; and three town patients were transferred, one to the beneficence of the State and two others to that of their relatives.

Including the 27 patients removed by death, the whole number discharged within the year was 123. Forty of them were beneficiaries of the Commonwealth, 65 were the wards of cities and towns, and 18 were supported by private funds.

Of the 476 patients who remained in the hospital at the close of the year, the cost of support of 157 is charged to the State and that of 259 to cities and towns, while the expenses of 60 are paid from either their own property or the private funds of other people.

The weekly average number of patients in each of the three classes, who were in the house in the course of the last two official years, is indicated in the subjoined table,—the averages being calculated upon the totals of the numbers present on the evenings of all the Saturdays in the year:—

		1883-84.		1884-85.				
	Males.	Females.	Totals.	Males.	Females.	Totals.		
State patients, .	83.37	71.73	155.10	82.29	72.15	154.44		
Town patients, .	113.88	137.35	251.23	118 48	143.10	261.58		
Private patients,	29.87	26.19	56.06	32.62	27.20	59.82		
	ł	1	1	1	1			

This table is introduced, as it has been in several preceding years, chiefly for the purpose of demonstrating the gradual but constant diminution, in both the number and the relative proportion, of the wards of the State; and the equally constant augmentation of those of the wards of cities and towns. It will be perceived that the changes still continue, although that of the State patients is less than in several former years. The increase of town patients for the year is ten.

The weekly average of all the patients in the house was 475 84, which is less, by the fraction one-tenth, than the daily average.

RECOVERIES.

Judging in accordance with our standard of mental health, and our opinions in regard to the extent to which, in individuals, that standard is modified by temperament, idiosyncrasy, education and habits, 29 of the discharged patients, of whom 17 were men and 12 women, had regained their natural mental condition to an extent which warranted a record of recovery. Fourteen of the men and 11 of the women had never before been under treatment at any institution, and 2 were here on their first admission, but had been patients at the Worcester Hospital, from which one of them had been discharged recovered.

Two men and one woman were here on their second admission. The woman and one of the men had been discharged as recovered on their first admission, and the other man as much improved.

One man was on his third admission, having previously been twice discharged as recovered. There was an interval of twenty years between his first discharge and his second admission. In the course of this long period he had pursued his usual avocation and supported a family, although he had suffered some slight attacks of the disorder not sufficiently severe to require his removal to a hospital.

No patient was discharged as recovered twice within the year, and consequently the number of persons recovered the same as that of patients recovered. The new statistical tables have already had an important effect, in one respect, upon the reported recoveries at the institutions in Massachusetts. Since their adoption, there have been very few instances in which the same person has been discharged recovered more than once in the course of the year covered by any one report, and so long as they continue in use there is little probability that any person will be credited with seven recoveries in a year—a distinction which had been accorded to at least one person in the antecedent history of one of the hospitals.

One of the men discharged recovered in the early part of March, was readmitted after an absence of a little more than five months, and is still here.

Among the recoveries there was one case of special interest, in consequence of its prolonged duration. The patient, a woman, was originally admitted at the Worcester Hospital, in March, 1871, and was transferred to Northampton in May, 1872. For several years, at frequently recurring periods, she was the most dangerous patient in the female department. It was not safe, at these times, for an attendant to enter her room alone. At length the frequency of the periods and the intensity and violence of the excitement began to diminish. Slowly but constantly, from year to year, there was an evident improvement, until at length she appeared to be well, and after a hospital life of more than fourteen years returned to her friends.

Of the patients discharged recovered, 8 were supported at the hospital by the State, 17 by cities and towns, and 4 by private funds.

DEATHS.

Notwithstanding the very low rate of mortality in 1883-84, the increase in the number of deaths within the year just closed is comparatively small. Indeed, there has now been a period of three consecutive years during which the death-rate has been materially below the average.

The whole number of deaths was 27. Sixteen of them were of men and 11 of women. Although phthisis - or consumption - does not, as usual, stand most prominent among the diseases which terminated fatally, yet the number of its victims is not exceeded by that of any other. were six each of it and of pneumonia. The tendency to the disease last mentioned was observable throughout the winter, and the number of cases of it in the house probably exceeded the aggregate number of the five next preceding years. As a consequence of its prevalence, the mortality from diseases of the lungs was much greater than from those of the brain and nerves, whereas the reverse is ordinarily true. Of the deaths not already mentioned, four are recorded as the result of organic disease of the brain, two of apoplexy, two of senile debility, and one each of five other diseases.

To these must be added one from suicide, and one which occurred, accidentally, upon a railroad.

One of the men, when walking out in company with an attendant and other patients, escaped and went to his home, about ten miles distant, where he remained over night. On the following morning he started to return to the hospital, on foot and alone, as he had once before returned under similar circumstances. Instead of taking the highway for carriages, he took the railroad, which has a double track. On his way, perceiving a train approaching him in front, on the track upon which he was walking, he stepped aside, upon the other track, and was almost immediately struck and killed by a train going in the opposite direction, which he evidently had not perceived.

The suicide was by a woman whose propensity in that direction was not known or suspected. She effected her object by strangulation, procured by semi-suspension in her room, in the course of her second night in the hospital.

Persons familiar with our previous reports will remember that the question of the comparative mortality of the sexes in the hospital has not infrequently been discussed. worthy of continued observation and mention. In no less than fifteen of the last eighteen years, both the actual and the proportionate number of deaths of men exceeded those of women. In the course of the last year, 290 different men were under treatment, and 16 of them died. This is equal to 5.51 per cent. The number of different women was 299, of whom 11, or 3.68 per cent., died. The proportionate mortality of women was only about two-thirds of that of men. In other words the rate was such that, with an equal number of patients of the two sexes, then, during a period in which 100 men would die, there would be but 67 (66.78) deaths of women. Shattered constitutions and profound disease of the brain are much the most frequent in the naturally stronger sex.

Of the 27 patients discharged by death, 14 were wards of the Commonwealth, and 11 of towns and cities, while only 2 were supported by individuals or by private funds.

A succinct numerical history of the mortality among the patients of the hospital, from the time of its opening, is included in the subjoined table:—

2		6. of	Aver- No. of nts.		DEATHS.		t. on No.	o ven
OFFICIAI YEAR.		Whole No. of Patients.	Dally Ave age No. Patients.	Men.	Women.	Totals.	Per cent. on Whole No. of Patients	Per cent. on Daily Aver- age No. of Pationts.
1858-59,		313	229.55	7	12	19	6.07	8.27
1859-60,		398	255 96	9	18	27	6.78	10 54
1860-61,		434	314.26	15	15	30	6.91	9.54
1861-62,		442	313.80	9	10	19	4.29	6.05
1862-63,		470	355 28	19	7	26	5.53	7.31
1863-64,		475	857.68	17	30	47	9.89	13.14
1864-65,		469	342.40	17	24	41	8.76	11.97
1865-66,		488	376.35	18	13	31	6.35	8.23
1866-67,		543	401.03	23	24	47	8.65	11.71
1867–68,	•	565	413 41	25	18	43	7.61	10.40
1868-69,		590	405.10	13	12	25	4.23	6.17
1869-70,		604	408.83	22	11	33	5.46	8.07
1870-71,		616	421.90	16	12	28	4.54	664
1871-72,	•	619	428.72	19	18	37	5.97	8.63
1872-73,		614	437.23	13	8	21	3.42	4.80
1873-74,		626	469.54	14	11	25	3.99	5.32
1874 75,		629	475.35	23	18	41	6.52	8.62
1875-76,		629	474.21	18	19	37	5.88	7.80
1876-77,		603	476.16	21	21	42	6.96	8.82
1877-78,		551	442 43	14	9	23	4.17	5.19
1878-79,		535	436.73	14	9	23	4.29	5.27
1879-80,		559	450 51	17	12	29	5.19	6.44
1880-81,		569	451.79	16	10	26	4.57	5.75
1881-82,		587	461.66	24	14	38	6.47	8.23
1882-83,		606	466.76	17	13	30	4.95	6.42
1883-84,		605	463.05	12	13	25	4.13	5.39
1884-85,		599	475.94	16	11	27	4.51	5.67

Deuths and their Ratios from Sept. 30, 1858, to Oct. 1, 1885.

By an inspection of the table it will be seen that the proportion of deaths, calculated upon the daily average number of patients, was smaller than in eighteen of the foregoing years, and larger than in only eight. Calculated upon the whole number of patients treated, it was smaller than in twenty-one years, and larger than in only five.

It requires but a mere general and transient glauce at the table to reveal the fact of a pretty largely diminished mortality in the course of the hospital's progress. For the purpose of giving a more definite idea of this diminution, the percentages of deaths in different periods are given below, as they have been in some former reports.

As compared with the whole number of patients treated, the mean or average death-rate was:—

For the whole period of twenty-seven years,		•	5.70 per cent.
For the first thirteen years,			6.49 "
For the last thirteen years,			5.02 "
While for the year just closed it was only			4.51 "

As compared with the daily average number of patients in the house, it was:—.

For the full period of twenty-seven years,		7.63	per cent
For the first thirteen years,		9.05	"
For the last thirteen years,		6.46	**
While for the year just closed it was only		5.67	"

The last method of calculating the ratio of deaths is the most accurate. The results, as given by it, demonstrate that, having a fixed and constantly equal number of patients in the house, then, during a period in which, with a death-rate of the first thirteen years, 905 patients would die, only 646 patients would die if the rate were that of the last thirteen years; or, as otherwise illustrated, where 100 patients died in the first period, only 71 died in the last.

WORSHIP AND ENTERTAINMENT.

Religious exercises were more or less regularly performed at some of the institutions for the insane anteriorly to the year 1830; but the plan of frequent gatherings of the putients on the evenings of secular days, for instruction, entertainment and amusement, is almost wholly the outgrowth of the last forty-five years. Beginning in an occasional exercise, and as a method of relieving the tedium of the monotony of the wards between the hours of supper and bedtime, it was gradually more and more developed, and more and more widely adopted, until it has now become an important, if not an almost necessary part of the system of treatment of the insane. In the annual reports of this institution during the last twenty years, the subject has been discussed, under its different aspects and relations, to such an extent as to render much enlargement upon it at the present time unnecessary.

In the report one year ago, the opinion was given that, at public institutions where the assemblies of patients for the purposes here indicated are so frequent as they are here, the most nearly constant method of entertainment should be

reading—the matter read not to be confined to any special subject or to any form or department of literature, but to take the widest range and comprise judicious selections from the whole. This view of the subject has met with approbation in at least one instance. A well-educated lady of literary tastes, who was formerly a patient in this hospital, gives her endorsement, as follows, in a letter recently written to one of her correspondents here:—

"I am especially interested in Dr. Earle's report, and his opinion of the exercises in chapel. I have reason to remember the readings gratefully, for not only were they of benefit at the time, but from them I gained ideas that have been of great value ever since. I should think there could be no question but that the readings should be by far the most frequent form of instruction and entertainment."

The subjoined schedule contains an account of the exercises in the course of the last official year, together with the number of days or evenings devoted to each:—

Exercises in the Chapel.

1.	On	THE SABBATH,— Divine worship,				52	days.
2.	On	SECULAR EVENINGS,					
		(a) Reading and Recitations, opened and co	losed	l with	mı	ısic :	;
		The Bible				17	86
		The Bible and selections of prose,				3	66
		The Bible and selections of poetry,				31	44
		The Bible and recitations,			·	2	
		Miscellaneous selections of prose,				118	"
		Miscellaneous selections of poetry,				21	
		Miscellaneous selections of prose an		etrv.		31	
		Poetry and recitation,				1	**
		Recitations of poetry,				1	44
		• •					
		(b) Lectures: —					66
		On Biblical subjects,	•	•	•	z	
		Method of teaching the blind, .	•	•	•	1	•
		(c) Other Entertainments:—					
		Pictures shown with the stereopticon	n,	•		7	**
		Concert,				2	66
		(d) Social Assemblies: —					
		Quadrille parties,				19	44
		No assembly,				57	"
		Total,	Digit	izeti by	G	365	days

This list shows that only upon 57 days in the course of the year was there no assemblage of the patients for the purposes indicated. It consequently follows that the number of days upon which they were thus convened was 308. This number is not so large as it has usually been in bygone time, for the simple reason that, during the last two years, the exercises have been omitted on the evenings of the reception days for visitors — two each week — in July, August and September. During the last twenty official years, the average number of days upon which the patients were thus brought together is 331. The largest annual number of times was 349, in the official year 1868-69, and the smallest 290, in 1883-84.

It is confidently believed that — with perhaps the exception of a very few institutions at which there is a constant gathering for morning and evening prayers, and where there are few or no miscellaneous exercises — no other hospital has so large an average as that just mentioned. There are some at which the assemblies are regular and constant during nine months of the year, but are wholly discontinued during the other three months. They may have as large an average for their season, but necessarily they cannot have for the year. The average attendance at these gatherings, for the year just ended, is 283; the largest, 310.

While thus chronicling, for the last time, the annual history of this department of the operations of the hospital, it appears incumbent upon me once more to recur to the importance of these exercises, as a factor of practical value in the administration of the affairs of an institution for the insane. Their influence for good may be summarily stated as follows:—

First. They obviate that listless, lifeless, oppressive monotony and tedium of the wards which formerly prevailed in such establishments, and which will inevitably prevail without them.

Second. They operate as a disciplinary power over both the body and the mind. The gathering together in the wards, the orderly progress to and from the place of meeting, and the quiet sitting during the exercises (always excepting the dances — and even these are practical lessons in order),

cannot fail more or less to operate as not only temporary but permanent suppressors of the eccentricities of action, the vagaries of conduct, and the tendencies to violence. Thus self-control comes in the place of waywardness, and order and quietude in the place of disorder and noise.

Third. They are a mental stimulus. As they teach physical order, so teach they order of thought. They offer to all a mental pabulum which is received and appropriated to an extent varying in degree according to the mental impairment; but, even to the most apathetic, operating, to some extent, as a conservator of what little mental power still remains, and to many, of better preserved or larger intellect, as an invigorator and a strengthener. Nothing is more certain than, other things being equal, the inmates of a hospital at which these exercises are a component part of treatment, will always appear less demented, less stupid, more intelligent and quicker and brighter in intellect, than in one where they are not.

Fourth. As they conduce to the general quietude of the house so do they largely contribute to the satisfaction and the contentment of its inmates, as well as to their regard for the officers who officiate at them. On the part of many of the patients there is a full appreciation of the efforts which are made for their entertainment and amusement.

Fifth. They give to the Superintendent an opportunity, which has not infrequently been taken advantage of at this hospital, for instruction and counsel to both attendants and patients, in regard to their relations to each other, and for any other remarks which may conduce to the improvement of the institution, or the harmony and general welfare of its inmates.

FARM.

In a commonwealth the public charitable institutions are the property of the organized citizens of that commonwealth. They are instituted by the people, and for the people. Hence I have always regarded it as most proper that an annual report from this hospital should be intended, in the character of its contents, for the people, and not for any special profession, denomination, or class of persons which may exist among them. I have consequently en-

deavored to portray the institution as it is, and have not attempted to make it, specially, a medical report. The hospital is in a section of the State which is largely agricultural, and draws a considerable proportion of its patients from the people engaged in that industry. Therefore, as well as from the fact that it is a very important department, both economic and hygienic, of the establishment, a due prominence has always been given to the farm.

Perhaps no season since the opening of the hospital has been more favorable for all the varieties of vegetable product which it has been thought judicious to cultivate here, than that which is now drawing towards its close; and although somewhat more favorable for some of them than for others, as, in the nature of things, every season must necessarily be, yet, in regard to no one was the crop a failure, and a fair harvest was gathered even from those which were least successful.

With the exception of a slight drought, which diminished the growth of rowen on some of the upland which was earliest mowed, the most inveterate scowler at the weather could find no food for grumbling at the past summer because of influences unfavorable to the production of hay. The first growth of grass produced 197% tons, a quantity which exceeds, by 22 tons, that of the first growth of any former year, and is larger, by 23 tons, than the whole crop harvested in 1884.

The after-growth yielded a fraction over 54 tons, — a quantity never before equalled. Thus the whole product was 251½ tons.

Inasmuch as all the milk consumed by the inmates of the hospital is produced on the premises, the quantity of hay grown upon the farm becomes an economic consideration of primary importance. The decision to purchase no more milk, but to make the establishment self-supporting in this respect, was made in the summer of 1864. It may not be uninteresting to learn the development of the farm, in this direction, in the course of the last twenty-one years. The following schedule shows the quantity of hay annually gathered upon the premises throughout that period, unimportant fractions of tons being omitted:—

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1864, e	stimated,		40	tons.	1875, w	reighed,		100	tons
1865,	46		62	"	1876,	4.		111	44
1866,	66		42	64	1877,	44		154	**
1867, w	eighed,		82	66	1878,	44		179	44
1868,	11		86	66	1879,	44		144	44
1869,	44		91	44	1880,	61		154	44
1870,	44		74	46 .	1881,	**		213	44
1871,	66		75	46	1882,	44		170	**
1872,	44		91	"	1883,	66		197	**
1873,	66		84	44	1884,	**		174	66
1874,	46		120	**	1885,	"		251	44

This gradual increase is a consequence, in part, of additional land acquired by purchase, and, in part, of the constantly improving fertility of that which was owned from the beginning. The growth upon the original farm has increased at least threefold since 1864.

It will be perceived that the home product of hay, in the earlier years of the period, was entirely inadequate to the support of a large dairy. This deficiency was supplied by the purchase of standing grass, and harvesting it. In 1867 the farm yielded 82 tons, and the purchased grass 140 tons; and in 1869, the harvest on the premises was 91 tons, and that from outside land 130 tons. We have paid, when the market value of hay was \$25 a ton, as much as \$1,700, in one year, for standing grass; and for eight or ten years the average cost was probably \$1,400. This year we paid \$100.10; and henceforth the farm will probably furnish essentially the whole of the hay required for home consumption.

Of milk, the whole product in the course of the official year was 26,156 gallons, which is a daily average of $71\frac{2}{3}$ gallons. But only one-third of this quantity is placed in the list of products; that being the estimated proportion derived directly from the farm, by pasturage, while the remaining two-thirds is supposed to be derived from purchased meal, and from the other home growths, as hay, roots, etc., for the value of which the farm is already credited in the list. The reported product of milk in 1865 was 13,836 gallons; and in 1866, 15,327 gallons. The proportionate increase since that time

pretty largely exceeds the similar increase in the number of inmates of the hospital.

Last year, the reported product of the orchards was 1,153 barrels of apples suitable for domestic use, and 100 barrels of cider. As the report was made before the close of the harvest, this quantity was, in part, an estimate. But the estimate was too low. Of apples, the actual quantity was not less than 1,250 barrels; and of cider, 118 barrels. As this is not the "bearing year" for the orchards, the expected product was necessarily small. The harvest, however, is now estimated at 357 barrels, which is sufficient to obviate the necessity of a large purchase.

In a former report it was stated, and the reasons therefor given, that the raising of swine has always been one of the leading agricultural interests of the institution. The "Hospital breed" has always been a popular one in the neighboring towns, and consequently there has been an outside market for pigs; while, until within recent years, there has been a sufficient market in the house for all the pork, ham, and lard which could be produced. The subjoined list shows the growth of this industry during the last twenty-one years.

Pork	Raised	upon	the	Farm.
------	--------	------	-----	-------

1865, .		6,265 p	ounds.	1876,		•	12,467	pounds.
1866, .		5,443	66	1877,			13,605	"
1867, .		7,416	66	1878,			14,451	66
1868, .		7,791	**	1879,			13,569	44
1869, .		8,469	44	1880,			14,729	**
1870, .		7,447	"	1881,			15,610	**
1871, .		7,863	44	1882,			14,414	44
1872, .		11,366	"	1883,			15,612	46
1873, .		10,511	46	1884,			10,1924	
1874, .		12,024	66	1885,			17,544	44
1875, .		12,693	46				•	

^{*} Quantity diminished by disease.

The increase, as will be seen, has been nearly threefold.

Forty-eight hogs were fattened and slaughtered in the course of the past year, the aggregate weight of the dressed carcasses of which was, as mentioned above, 17,544 pounds.

The heaviest weighed 598 pounds; the lightest, 170 pounds. The average weight of the heaviest ten was 511 pounds; of the heaviest five, 538 pounds; and of the whole, 365 pounds. There is less attempt than formerly to produce large animals. Both economy and excellence in quality of meat are promoted by slaughtering at a medium weight. The quantity of pork and of lard was so much in excess of the needs of the hospital, that 1,381 pounds of the former and 454 pounds of the latter were sold.

The poultry has been under the immediate, and almost the sole, charge of one of the patients, who has manifested both zeal and knowledge in its management, and arrived at results never before attained or attempted at the hospital; and, had it not been for the depredations of wild birds and beasts, his success would have been materially greater. The product has been about three hundred dozen of eggs, nearly five hundred pounds of chickens for the table, and an increase of over a hundred in the flock.

Mr. Mercier, the farmer, has furnished the following schedule of products, in some items of which the stated quantities are partly estimated, because the harvest is not yet complete.

LIST OF PRODUCTS IN 1885.

Hay (first growth of home farm), 155% tons, at \$16,	•	. \$2,494 00
Hay (south lot), 23\frac{1}{8} tons, at \$16,		. 870 00
Hay (Clarke orchard), 18% tons, at \$16,		. 294 00
Hay (after-growth of whole farm), 541 tons, at \$16,		. 866 00
Corn fodder, dry, 25 tons,		. 175 00
Oat fodder, 8 tons,	•	. 80 00
Corn, 440 bushels,		. 220 00
Oats, 200 bushels,	•	. 100 0ქ
Potatoes, 3,711 bushels,	•	. 1,855 50
Broom-seed, 45 bushels,		. 18 00
Broom-brush, 900 pounds,		. 72 00
	•	. 86 40
Sugar beets, 1,270 bushels,		. 381 00
Beets, 226 bushels,		. 113 00
Onions, 416 bushels,	•	. 270 40
Turnips, 600 bushels,	•	. 240 00
Parsnips, 65 bushels,		. 32 50
Beans (Lima), in shell, 127 bushels,	•	. 190 50
Beans (common), in shell, 89 bushels,	•	. 89 00

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Description of horizon									•••	00
Beans (string), 20 bushel		•	•	•	•	•	•	•	\$3 0	
Beans (Lima), dry, 8 bus			•	•	•	•	•	•		50
Pease (green), in pod, 14				•	•	•	•	•	235	
Sweet corn (green), in ea	ar, 3	i9 bt	ishels,	•	•	•	•	•	369	
Tomatoes, 280 bushels,	•	•	•	•	•	•	•	•	280	
Lettuce, 68½ bushels,	•	٠	•	•	•	•	•	•		50
Cucumbers, 105 bushels,				•		•	•	•	105	
Squashes (summer), 86 b	oush	els,	•	•	•	•	•	•		00
Squashes (winter), 4 ton	8,	•	•	•	•	•	•	•	120	
Melons, 10 tons, .	•	•	•	•	•	•	•	•	100	
Asparagus, 311 bushels,	•	•	•	•	•	•	•	•		7 5
Pie-plant, 51 bushels,	•	•	•	•	•	•	•	•		75
Beet greens, 32 bushels,			•	•	•	•	•	•		00
Spinach, 4 bushels, .		•	•		•	•	•	•	_	00
Cabbages, 2,300 heads,		•					•		115	00
Currants, 14 bushels,			•			•	•		42	00
Apples, 357 barrels, .						•			857	00
Pears, 81 bushels, .									81	00
Quinces, 7 bushels, .						•			17	50
Grapes, 200 pounds, .									8	00
Veal (raised here), 813 p	oun	ds,							98	78
Pork, 17,544 pounds,.									1,193	20
Pigs, sold, 179,					•				494	25
Pigs (roasting), 1, .									2	00
Turkeys, 162 pounds,									39	93
Chickens, 4871 pounds,									94	69
									7	00
Eggs, 296 dozen, .									76	75
Milk (grass-fed), 34,874	quar	ts,							1,743	70
Cider, 25 barrels, .									62	00
Calfskins, 7,	•								8	75
Calfskins, 7, Young calves, sold, 17,									37	00
Wood, 30 cords, .									90	00
Fence posts, 50,	•									00
Corn husks, 11 tons, .										00
, •								-		

\$14,147 85

Notwithstanding the lowness of prevailing prices, the valuation of the products exceeds that of 1884 by the not insignificant sum of \$1,603.67; and that of 1884 was larger, by nearly one thousand dollars, than that of any preceding year in the history of the hospital.

The stock of animals upon the farm at the termination of the official year was 9 horses, 8 working oxen, 2 fat oxen, 1 bull, 81 cows, 4 fat cows, 7 heifers, 3 calves, 164 swine, and about 300 domestic fowls.

The practice is still continued of purchasing, in October or November, one hundred or more sheep, and from fifteen to twenty three-years-old grass-fed cattle, and slaughtering them on the premises, as needed, in the course of the winter. In this way the mutton costs but little more than one-half the retail market price.

The new vegetable cellar has proved a valuable acquisition, not only to the domestic department of the institution, but to the agricultural department as well. The bins for the vegetables are raised above the concrete floor, and a space is left between them and the cellar wall. Their bottoms are narrow boards, with intervening spaces. There is, consequently, a free circulation of air not only around them, but upward, among the vegetables which they contain. Potatoes stored in them through the winter were little, if any, less solid and firm than when they were taken from the ground.

How the Hospital is Supported.

The following financial exposition is the same that was published in the annual report for 1883-84, with the exception of changes necessary for its adaptation to present circumstances.

Although a State institution, this hospital has received no gratuitous assistance from the State since the spring of 1867. Since that time it has relied for its income solely upon the products of its farm, the board bills of its patients, and the small sum of ten dollars each for the funeral expenses of State patients who die in the hospital, and whose remains are not removed for burial. The receipts from the last mentioned source during the past year were only fifty dollars.

For the entire support of State patients, including clothing and all loss from breakage and other kinds of destruction, the hospital received \$3.50 each per week, from the treasury of the Commonwealth, from April 1, 1870, to April 1, 1879. For one year after the latter date, it received but \$3 each per week; and since April 1, 1880, it has received \$3.25 each per week. This is the compensation fixed by statute law. One hundred and fifty-seven, or more than

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one-third of the inmates, now belong to this class. During the past year the weekly average of them was 32.45 per cent., or a trifle less than one-third of the whole.

For town patients it has received, and now receives, from the treasuries of the towns respectively in which these patients have legal settlements, the same sum per week (\$3.25 each) as from the State treasury for State patients; but the towns clothe their patients, and remunerate the hospital for damages done by them. Two hundred and fiftynine, or more than one-half, of the inmates are now in this class. The weekly average of them for the year was very nearly 55 per cent. of the whole.

For private patients there is no uniform price. The average pay from all who were here Sept. 30, 1885, was \$5.083 each, per week. Clothing and damages are extra charges. The weekly average of these patients, during the past year, was a fraction over 12 per cent., or one-eighth of the whole.

The average weekly pay, per capita, charged by the hospital for all its patients—State, town and private—in the course of the year, is \$3.497, or three mills less than three dollars and a half. Such are the pecuniary resources of the institution. We turn to the results of

THE FINANCE OF THE LAST TWENTY YEARS.

In April, 1865, the hospital was freed from debt, and the financial statement at the close of that month showed a balance of \$302.04 in its favor. Between that time and the first of June, 1867, it received a direct bonus from the State of \$5,000 in two appropriations, for specific purposes,—one of \$2,000 and the other of \$3,000.

As an offset to the \$5,000 bonus, the hospital has purchased and paid for several lots of land, amounting to nearly one hundred and seventy-five acres, together with four dwelling-houses. The total cost of this real estate was \$30,883.92. The State, then, has, in this way alone, been overpaid for its bonus, in the sum of \$25,883.92.

The amount paid by the hospital for repairs and improve-

ments in the course of the twenty years, from Sept. 30, 1865, to Sept. 30, 1885, is \$233,702.44.

The surplus of cash assets now on hand, including the reserve fund, is \$31,819.27, or \$31,517.23 larger than it was on the 30th of April, 1865.

The purchased provisions and supplies, including fuel and stored clothing now on hand, are estimated to have cost \$14,762.87. The estimated value of similar supplies on the 30th of April, 1865, was \$2,500. The increase of assets under this head is, therefore, \$12,262.87.

The value of household furniture in the hospital is, at a low estimate, at least \$10,000 greater than it was on the 30th of April, 1865, at the same rate or standard of appraisal. To be certain, however, of no exaggeration, let it be called \$8,000. Collecting these several sums, the account of debit of the Commonwealth to the hospital appears to be as follows:—

Excess of cost of land	0761	dire	ct boı	nus,				\$25,883 92
Repairs and improvem	ents	, .						233,702 44
Excess of present cash	8.88	ets,						31,517 23
Increase of provisions	and	supp	lies,					12,262 87
Increase of furniture,	•		•	•	•	•		8,000 00
Total,			•			•		\$311,366 46

The necessary current repairs of the buildings may be estimated at \$3,000 annually. Deducting this sum for each of the twenty years since Sept. 30, 1865, a total of \$60,000, there is a remainder of \$251,366.46. To this amount, then, has the hospital assisted itself to things, for most of which it is generally expected that such institutions will rely upon direct appropriations from the treasury of the Commonwealth.

In the preparation of this summary, we have taken into account only the actual disbursements of money by the hospital, in contributing to its own improvements. But aside from this, a large amount of work, in effecting those improvements, was performed by the teams of horses and cattle belonging to the institution, and by the regular corps of its employees. Agreeably to all correct business prin-

ciples, as well as to the custom at some similar institutions, the hospital should be credited with the amount of the value of this labor. But no credit has ever been given for it. Many thousands of dollars might, in this direction, be justly added to the sum above mentioned, as the product of the efforts of the hospital in the promotion of its own material progress.

In connection with the above exposition, it may be interesting to know to what extent the tax-payers of the State have contributed to the institution. From a list, furnished by the State treasurer, of all the appropriations made either for the construction, the repairs, or the improvements of the hospital, I find that, from the time of the passage of the act authorizing its erection, down to the present day, it has cost the people of the Commonwealth, only three hundred and seventy-five thousand five hundred and fifty dollars (\$375,-550).

THE CURABILITY OF INSANITY.

A STATISTICAL STUDY.

Notwithstanding the manifold triumphs of medicine, of surgery, and of other sciences and arts, there are inexorable limits to their achievements and their power of achievement. Nature yields in a measurable extent to the conceptions, the devices, the ministrations, and the administrations of human skill, but, as if to mock them in the end, and to demonstrate the retention of her inherent supremacy, she at length establishes a position and defies their power. These are trite truths, so trite, indeed, that the mention of them is an apparent superfluity: and yet they answer my purpose as an introduction, and are not wholly inappropriate at the beginning of a paper in which their truthfulness receives another illustration.

Nowhere are these truths more conspicuous, than in the sphere of the enterprises to overcome the disabilities of what are termed the defective classes of mankind—defective from

imperfections either congenital or acquired. It is, indeed, perhaps true that, in the treatment of the blind, in the attempt to obtain a substitute for the eye and thus open an avenue of perception to the imprisoned brain, although nothing has been discovered which is, by very far, a full equivalent of the perfect natural organ, the success has equalled the expectation. But in reference to some of the other classes this is not true; and the hopes and confident anticipations awakened in the public mind, in the comparatively early periods of the modern endeavors at improvement, have been doomed to at least a partial disappointment.

Some forty years ago, when the efforts of Dr. Guggenbuhl, in Switzerland, to elevate the idiot from his congenital degradation had been imitated in other parts of Europe, the world of philanthropy and the world of thought were startled by the announcement of a certain degree of success; and this, in the minds of the people, was magnified to such an extent as to give the general impression, that idiocy is so far amenable to culture that the great mass of its subjects can be raised nearly to a level with the average of the race. But, after the experience of a sufficient number of years to furnish a reliable test, it is found that, although partial imbeciles are susceptible of a degree of elevation in a ratio inverse to the degree of mental defection, and although, with the inclusion of the idiot, the advantages acquired are more than sufficient to vindicate the enterprise, yet the congenital idiot is essentially the congenital idiot still.

The history of the instruction of deaf-mutes in vocal language is similar, in these respects, to that of the attempts to redeem the idiot from his infirmity. Surprising results were attained in some instances, and public opinion, taking its shape and tone from these, leaped to the conclusion that, although deafness might continue, permanent mutism was soon to become a thing of the past. Experience has not yet shown that a majority of deaf-mutes are susceptible of satisfactory instruction and achievement in this method of intercommunication.

A similar exaltation of belief and of expectation has occurred in the specialty of the treatment of insanity, and, unfortunately, a similar disappointment has awaited all who had become interested in the subject, whether in the profession or among the people at large.

It is proposed, in this paper, to show, by the collocation of statistics, the actual results of treatment at a large number of institutions, both foreign and domestic, bringing our knowledge of such general results to a later date than that contained in any former statistical essay.

RECOVERIES AT BRITISH ASYLUMS.

The reports of many, if not most, of the British asylums, contain a table, originally designed by Dr. Thurnam, in which the admissions, discharges, recoveries and deaths of patients are classified according to the duration of the insanity.

These classes are as follows: --

- 1st. First attack, and within three months, on admission.
- 2d. First attack, above three and within twelve months, on admission.
- 3d. Not first attack, and within twelve months, on admission.
- 4th. First attack or not, but of more than twelve months, on admission.
 - 5th. Congenital and unknown.

This is a well-conceived and useful table for its intended purpose; and, if prepared with sufficient care and discrimination, cannot well fail to throw light upon the question of curability as affected by duration, or by the fact of first or subsequent attack.

Nearly two years ago I collated the statistics of this table in a series of the annual reports of twenty-three of the British asylums, so far as relates to all cases of less duration than twelve months at the time of admission. For more than fifty years, all such cases have, in the United States, been called *recent*, in contradistinction to those of remoter origin, which have been called *chronic*; and my object in

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collecting the statistics was to ascertain the degree of curability to which those asylums had attained in the treatment of what we call recent cases.

Of each of twelve of the asylums these statistics, which are embodied in Table I., extend over a series of six consecutive years, the last of which was, in some instances, 1882, and in the others, 1883. At three of the asylums they extend over five years; at one, over four years; and at seven, over three years. At each asylum the years are consecutive; and at no one is the last of the series later than 1878, the majority being either 1880, 1881, or 1882.

Table I. — Cases of less than Twelve Months, at Twenty-Three British Asylums.

Admis. Recov. Per cent. Admis. Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. of Recov. alons. ered. of Recov. of Recov. ered. of Recov. ere	TOTAL	
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Younty, 1877-82 264 384 60,00 344 97 25,16 Roy, 1878-83 228 124 224 114 296 98 25,28 rk, 1878-80 44 224 52.70 147 49 33.38 ork, 1877-80 44 20 50.00 21 49 32.38 ork, 1877-80 641 27 41.96 126 22 17.46 eath, 1877-80 643 26 46.84 188 54 29.50 don, 1877-80 63 27 44.36 28 10 35.71 don, 1878-80 181 71 39.25 28 28 48.28 don, 1877-80 189 71 39.25 38 31 12.51 n, 1877-80 189 45.45 18 45.28 18 15 25.71 n, 1877-79	63 25 83 1,446	541 319
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0,	28 48:28	70.
	247	28.
Counties,	061 17.88 21	44
Counties,	8.69	25
37 52.86 35 9 25.71	4 28.57 61	30
	9 25.71 105	22
	613 764 10.929 4.815	4.768 2.640
r average per cent., . 29.24	29.24	

The results of these statistics may be briefly stated.

1st class (first attack, less than 3 months' duration), the admissions were 8,316; recoveries, 4,051; per cent. of recoveries, 48.71.

2d class (first attack, 3 to 12 months' duration), admissions, 2,613; recoveries, 764; per cent. of recoveries, 29.24.

3d class (not first attack, less than 12 months' duration), admissions, 4,768; recoveries, 2,640; per cent. of recoveries, 55.37.

By uniting the first two classes, we have all cases of first attack and of less duration than one year. Of these, the admissions were 10,929; the recoveries, 4,815; and the proportion of recoveries, 44.06 per cent.

Of the third class the admissions were 4,768; the recoveries, 2,640; and the proportion of recoveries, 55.37 per cent. Here we have another illustration of the fact that recovery takes place in a less proportion of cases of first attack than in cases subsequent to the first—a fact which was demonstrated in an article on curability in the report for 1880 of this hospital.

By a union of the three classes, all of which contain, exclusively, cases of less than twelve months in duration, and are consequently here known as recent cases, we obtain the following results: Admissions, 15,697; recoveries, 7,455; proportion of recoveries, 47.49 per cent.

Among this series of twenty-three asylums is the Retreat at York, the statistics of recoveries at which, from 1796 to 1819, have been quoted, ever since they were published, as one of the authorities for the eminent curability of mental disorders. It may not be uninstructive to bring into juxtaposition those statistics of three-fourths of a century ago, and those of the same institution for the five years from 1876 to 1880 inclusive. This is done in the following table:—

	•			 	Per cent. of 1st Class.	Per cent. of 2d Class.	Per cent. of 3d Class.	Per cent of Total.
1796–1819,			•		85 10	55.55	61.76	68.25
1876-1880,					50 00	42.86	36.11	43.30
Decrea	se of	per c	ent,		35.10	12.69	25.65	24.95

Table II. — Per cent. of Recoveries at the York Retreat of Cases of less Duration than Twelve Months.

The diminution of the proportion of recoveries on the admissions is, for the first class, 35.10 per cent. of the admissions; for the second class, 12.69 per cent.; for the third class, 25.65 per cent.; and for the whole, 24.95 per cent., or, in round numbers, one-fourth of the admissions.

The proportion of diminution from the actual recoveries of the first period, is, for the first class, 41.17 per cent., or a fraction more than two-fifths; for the second class, 22.84 per cent., or a fraction more than one-fifth; for the third class, 41.53 per cent., or a fraction over two-fifths; and for the whole, 36 25 per cent. In other words, for each hundred of recoveries of what we call recent cases, three-fourths of a century ago, there are but sixty-four (63.75) recoveries now.

Some months after the collection of the foregoing statistics, but before any use had been made of them, Dr. T. A. Chapman, of the Hereford Asylum, England, published a similar but much larger collection, in "The Journal of Mental Science" for July 1884. It contains the statistics of "46 English County and Borough Asylums, and the Edinburgh and Glasgow Royal Asylums, for (in most instances) 11 years, 1872 to 1882 inclusive." Here is a collocation of the remarkable number of 93,443 cases of insanity, all of them classified as in the foregoing table. The whole number of recoveries was 35,468, or 37.95 per cent. of the admissions. But as the recoveries of recent cases are now alone under consideration, we will turn our attention especially to them. The subjoined table (III.) shows the numbers, and the percentage, in each of the first three of Thurnam's classes.

CLASSES.	Admis- sions.	Recoveries.	Per cent. of Recoveries.
Class I. 1st attack; less than 3 months' duration, .	38,283	18,654	48.72
Class II. 1st attack; 3 to 12 months' duration,	12,126	3,421	28.21
Class III. Not 1st attack; less than 12 months' duration,	19,574	10,494	53.61
Totals and mean per cent.,	69,983	32,569	46.52

Table III. - Recoveries of Cases of less Duration than one Year.

Dr. Chapman's table includes, apparently, twenty-eight asylums that are not in mine, and mine has five that are not in his. Of these five, two are in Scotland and three in England, the Retreat at York being one.

In regarding these two collections of statistics, so much alike and yet so different, almost the first impression received from them is the striking similarity of results. These are, indeed, so nearly identical as to justify one's faith in the sometime possibility of a close approximation to accuracy in this branch of vital statistics. The difference in the proportion of recoveries, as indicated by the two, are, for the first class of cases, only one one-hundredth (.01) of one per cent.; for the second class, one and three hundredths (1.03) per cent.; for the third class, one and seventy-six hundredths (.97) of one per cent.

When Dr. Woodward, in 1833, took charge of the Worcester Hospital, he had before him, as exemplars, three well-known pioneers in the field of high percentages of recoveries. Dr. Burrows, in 1820, had reported 91.32 per cent. as the result of the treatment of 242 cases, of which 221 recovered. He also published the results, from 1797 to 1819, at the York Retreat, where, of 47 cases of less duration than three months, the recoveries were 40, or an equiv-

1885.7

alent of 85.10 per cent. In 1827 Dr. Todd, at the Hartford Retreat, reported that, of 23 recent cases admitted, 21 had recovered, a proportion of 91.3 per cent. In 1841, Dr. Woodward obtained his highest proportion of recoveries, 91.42 per cent., by the treatment of 70 cases, 64 of which recovered; and in 1842, Dr. Galt, at the Williamsburg (Virginia) Asylum, excelled all of his predecessors in the announcement that of 13 recent cases under his care 12 had recovered, a percentage of 92.3.

Here we have five different, well-known medical authorities, each confirmatory and corroborative of the others, and all of which have, for an average of half a century, been regarded as a kind of oracular proclaimers of the possible achievement of recovery in about 90 per cent. of recent cases. Yet, singularly enough, the whole of the five separate reputations were built, and the oracles established, upon the treatment of an aggregate of only 395 cases.

On the other hand we have before us, in Dr. Chapman's table, the results of treatment of a number of recent cases which lacks but seventeen to make it seventy thousand, and the recoveries are only 32,569, or 46.52 per cent. This ratio of curability is only eighty-six hundredths of one per cent. more than half as large as that which was claimed by Dr. Burrows, and only thirty-seven hundredths of one per cent. more than one-half as large as that of Dr. Galt. Even in the cases of first attack and of only three months' duration, of which there were 33,283, the recoveries were but 18,654, or 48.72 per cent. In the light thrown upon the subject by this unparalleled collection of recent cases, what becomes of the once exceedingly fashionable assertion that "from seventy-five to ninety per cent. can be cured"?

Recoveries at Thirty-Nine (15 + 24) American Institutions.

Inasmuch as neither Thurnam's table nor its equivalent in any other form is used at the American institutions, it is impossible to group or to analyze the results at the latter on

^{*} The fact should not be overlooked that, if the word recent be used in its American signification, applying to all cases of less duration than one year, the proportion of recoveries at the Retreat was only 68.25 per cent., the admissions being 126, and the recoveries 86.

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precisely the same basis in all respects. upon looking over the American reports, I find that a large amount of matter may be brought together, illustrative of the proportion of the reported recoveries of recent cases.

In the statistics of a majority of our hospitals, although in reference to admissions the duration of the insanity is given, and hence a distinction between recent and chronic cases rendered possible, yet no such discrimination is made in regard to patients discharged. The subjoined table contains the results, in regard to recovery, for a series of from three to six years, of fifteen American hospitals, in the reports of which the recoveries of cases of less than twelve months' duration are numerically given. The time during which each hospital, respectively, furnished these statistical results is mentioned in the table.

TABLE IV. - Whole Number of Recoveries, and Recoveries of Cases of less than Twelve Months' Duration, at Fifteen American Institutions.

		ADM	saioxa.		DISCHA	RGED REC	OVERIES.	
ASYLUMS.	Years.	Under 12 Months.	Whole Number.	Under 12 Months.	Per cent. of Recent Cases.	Whole Number.	Per cent. of Whole Num- ber.	Per cent. of all Recoveries on Recent Admissions.
Elgin, Concord,	6 5	488 334	1,017 536	197 148	40.37 44.31	246 161	24.19 30.04	50.41 48.20
Worcester, .	5	593	1,254	191	32.21	254	20.26	12.83
Taunton,	5	824	1,619	300	36.41	369	22.79	44.78
Utica,	5	1,518	2,184	661	43.54	716	32.78	47.17
Harrisburg, .	5	895	716	117	29.62	138	18.58	33.67
Dixmont,	5	646	1,117	238	36.84	288	25.78	44.58
Dayton,	5	607	977	285	46.95	342	35.00	56.34
Ossawatomie, .	5	398	707	165	41.46	217	30.69	54.52
McLean, .	4	207	308	81	39.13	89 104	28.90	42.99 46.43
Northampton, .	4	224	511	75	33.48	458	20.35 22.04	47.61
Danvers, .	4	962	2,078	361	37.53		22.93	39.46
Columbia, S C.	4	408	702	110	26.96 37.93	161 80	29.09	45.98
Boston,	3	174	275 561	66 117	41.05	162	28.88	56.84
Winnebago, .	0	285,	901	117	21.00	102	20.00	00.04
Totals and mean								
per cent., .	68	8,063	14,562	3,112	38.59	3,780	25.96	46.88

The aggregate of the admissions of all cases is 14,562; the aggregate recoveries, 3,780; and the proportion of

recoveries, 25.96 per cent. The largest proportion was 35 per cent., at Dayton; and the smallest, 18.58 per cent., at Harrisburg. At five others it was less than 23 per cent., and at still five others less than 30 per cent.; while at three besides Dayton, it was over 30 per cent.

The aggregate of admissions of recent cases, is 8,063; that of recoveries of recent cases, 3,112; and the proportion of recoveries of recent cases, 38.59 per cent. The largest proportion is 46.95 per cent., at Dayton; and the smallest, 26.96 per cent., at Columbia, S. C. Of the thirteen others, the proportion at one was less than 30 per cent.; at two, between 30 and 35 per cent.; at five, between 35 and 40 per cent.; and at five between 40 and 45 per cent.

Finding that, in despite of the traditional "75 to 90 per cent." of some of the fathers, not one of these hospitals discharged even 47 per cent. of recoveries of recent cases, while the mean or average of all of them was less than 39 per cent., I studied the relation between the whole number of recoveries and the number of admissions of recent cases. The whole number of recoveries is larger by 668 than the recoveries of recent cases, and the number of admissions of recent cases is 6.499 smaller than the whole number of admissions. Yet, strange as it may appear, the total of recoveries is only 46.88 per cent. of the admissions of recent cases! The largest proportion, 56.84 per cent., is at Winnebago, and the least, 33.67 per cent., at Harrisburg. Of the remaining thirteen hospitals, the proportion is less than 40 per cent. at one; between 40 and 45 per cent. at four; between 45 and 50 per cent. at five; between 50 and 55 per cent. at two; and over 55 (56.34) per cent. at one. Thus, after aiding and assisting the recoveries of recent cases by a supplementary and a complimentary gift of the certainly not despicable number of 668 cases, we have been unable to swell them even to 50 per cent. of the admissions of recent

We now come to the hospitals which give the duration of the disease in the cases admitted, but give no such information in respect to the cases discharged. The following table includes the statistics, for a term of from three to six years each, of twenty-four institutions of this class. Of six of



them the term was six years; of eleven, five years; of six, four years; and at one, three years:—

Table V. — Recoveries at Twenty-four American Institutions.

		ADM	ssions.		DISCHARGI	:8.
Hospital.	Years.	Under 12 Months'	Total Admis- słons.	Total Recov.	For cent. of Recoveries on all Admissions.	Per cent. of all Recoveries on Admissions of Jessiban 12 Mos Duration.
Jacksonville, Ill.,	6	1,000	1,605	440	27.41	44.00
Mt. Pleasant, Iowa, .	6	852	1,548	400	25.84	46.95
Fulton, Mo.,	6	675	1.162	564	48.51	83.56
St. Joseph, Mo.,	6	435	740	257	34.73	59.08
Lincoln, Neb.,	6	414	654	267	40.83	64.49
Jackson, La.,	6	83	231	63	27.27	75.90
Hartford Retreat,	5	300	434	150	34.56	50.00
Middletown, Ct.,	5	492	1,168	241	20.63	49.98
Middletown, N. Y.,	5	503	775	300	38.71	59 64
Trenton, N. J.,	5	373	786	244	31.04	65.42
Danville, Pa.,	5	263	695	110	15.83	41.83
Williamsburg, Va., .	5	165	380	171	45.00	104.00
Richmond, Va.,	5	357	559	254	45.44	71.15
U. S. Gov't Hospital, .	5	549	1,099	357	32.48	65.03
Jackson, Miss.,	5	235	526	228	43.35	97.02
Cleveland, O.,	5	681	1,135	414	36.48	60.79
Longview, O.,	5	470	882	325	36 85	69.15
Brattleboro, Vt.,	4	199	344	88	25.58	44 22
Stanton, Va.,	4	207	467	201	43.04	97.10
Weston, W. Va.,	4	136	328	104	31.71	76.47
Pontiac, Mich.,	4	320	707	145	20,51	45.31
Madison, Wis.,	4	307	746	163	21.85	53.09
St. Peter Minn.,	4	486	1,168	267	22.86	54.94
Augusta, Me.,	3	358	617	180	29.17	50.28
Totals and mean per						
cent.,	118	9,860	18,756	5,933	31.63	60.17

The total of admissions is 18,756; the total of recoveries, 5,933; and the proportion of all recoveries on all admissions, 31.63 per cent. The largest percentage of recoveries, 48.54, was at Fulton, Mo., and the smallest, 15.83, at Danville, Pa. Of the remaining 22 institutions, the proportion was less than 23 per cent. at four; from 25 to 30 per cent. at five; from 30 to 35 per cent. at five; from 35 to 40 per cent. at three; from 40 to 45 per cent. at three; and from 45 to 46 per cent. at two.

The whole number of recent cases admitted was 9,860; the whole number of recoveries, as before stated, 5,933; and the percentage of all recoveries upon the number of recent cases admitted, 60.17. Here, then, by setting aside and disregarding the 8,896 cases of more than 12 months

duration, we have succeeded in raising the recoveries to a point above 50 per cent.

By the union into one group, so far as they are susceptible of such union, of the contents of these two tables, we obtain the following aggregate results.

In 39 American hospitals, during a period of from three to six years each, making an aggregate of 186 years of hospital work, the number of patients admitted was 33,318; the number of patients discharged recovered, 9,713; and the proportion of recoveries, as compared with admissions, 29.15 per cent. In the factors producing this result it will be observed that all the cases of duplicate, triplicate and manifold recoveries of one and the same person, are included, and yet the recoveries do not rise to 30 per cent.

The whole number of recent cases admitted was 17,923; the total of recoveries of both recent and chronic cases, as already mentioned, 9,713; and the proportion of all recoveries, as compared with the admissions of recent cases, 54.19 per cent. But be it not forgotten that this result is obtained by the sacrifice, or annulment, of fifteen thousand three hundred and ninety-five (15°395) admissions, or, in other words, by calculating the proportion of recoveries upon a little more than one-half of the number of admissions.

RECOVERIES AT TWENTY AMERICAN HOSPITALS; THIRD TERM OF FIVE YEARS.

It will, perhaps, be remembered that my monograph on the Curability of Insanity, which was prepared in 1876, contained a list of twenty institutions for the insane, so tabulated with their statistics as to show the proportion of recoveries at each of two quinquennial periods,—the first of those periods being the second quinquennium of the existence of those hospitals, respectively, and the last period being the quinquennium terminating in either 1876 or one of the two immediately preceding years. The longest time wholly intervening between those two quinquennia was 44 years, at the McLean Asylum, Mass.; the shortest, 2 years, at the Mendota Hospital, Wisconsin; and the mean or average time, 18½ years. But the true mean time, as applied to the gathering of the statistics—that is, the time

from the middle of the first quinquennium to the middle of the last - was five years longer, or 231 years.

The total of admissions in the first period was 14,516; the total of recoveries, 6,689; and the proportion of recoveries on admissions, 46.08 per cent. The admissions of the second period were 24,383; the recoveries, 8,354; and the proportion of recoveries, 34.26 per cent., or a fall of 11.82 in that This diminution equalled one-fourth, or to be proportion. exact, 25.66 per cent., of the recoveries of the first period.

As eight years have elapsed since the close of the second period, it has appeared to me that some similar researches, at a still later date, might tend more fully to illustrate the subject of curability, and perhaps secondarily, or indirectly, the general character of the disease. Accordingly, I have collected the statistics of admissions and recoveries at the same twenty institutions during a third period of five years, that period terminating, at nineteen of them, in or with 1884, and at one where the reports are biennial, in or with At two of the institutions, both of which use biennial reports, the duration of the period is six years. statistics, together with the results in each of the first two periods, are contained in the following table: -

Table VI. Recoveries at Twenty American Hospitals; Three Terms of Five Years Each.

48.55 1871-76 38.62 11.93 1880-84 1,008 296 29.38 7.28 2 46.92 1872-76 30.43 13.07 1878-84 651 123.36 7.38 4.6.92 1872-76 30.43 13.07 1878-84 651 123 22.26 7.38 4.6.92 1877-75 29.75 18.84 1880-84 421 123 22.22 7.93 3 4.3.46 1877-75 29.75 18.84 1880-84 421 123 20.22 7.93 4.3.46 1877-76 29.75 18.80 42.1 1318 29.22 7.93 4.3.46 1877-76 35.71 18.19 1880-84 453 163 35.76 3.00 4.45 1877-76 35.21 18.19 1880-84 453 163 35.76 3.45 3.45 4.00 3.75 3.00 3.45 3.76 3.45 4.00 3.77 3.70 3.76 <td< th=""><th>INSTITUTION.</th><th>First Five Years.</th><th>Per cent. of Re-</th><th>Second Five Years.</th><th>Per cent. of Re-</th><th>Decrease of per cent. of</th><th>Third Five Years.</th><th>Total Ad- Total Ro- mitted. covered.</th><th>Total Re-</th><th>Per cent. of Re-</th><th>Per cent. of Recoveries compared with that of Second Five Years.</th><th></th><th>of per cent. of Recov- erles from</th></td<>	INSTITUTION.	First Five Years.	Per cent. of Re-	Second Five Years.	Per cent. of Re-	Decrease of per cent. of	Third Five Years.	Total Ad- Total Ro- mitted. covered.	Total Re-	Per cent. of Re-	Per cent. of Recoveries compared with that of Second Five Years.		of per cent. of Recov- erles from
Augusta, Me.;			COVERIGE.		coveries.	eries.				coveries.	Decrease.	Increase.	First Five Years.
Concord, N. H., 1848-52 46.92 1872-76 30.43 13.07 1878-83 651 124 22.36 Brattlebord, V. t., 1841-42 46.59 1871-75 30.43 13.07 1878-83 651 124 22.26 Worvester, Mass., 1839-43 48 69 1871-75 29.76 18.03 1880-84 13.19 264 20.01 Bull Buller Hospital, N. Y., 1848-82 357.40 1870-74 39.21 18.19 1880-84 453 162 35.76 Bloomingule, N. Y., 1848-82 47.55 1871-75 32.11 1880-84 453 162 35.76 Bloomingule, N. Y., 1848-82 47.55 1871-75 32.11 1880-84 453 162 35.76 Flattush, N. Y., 1848-82 47.55 1871-75 32.11 1880-84 628 20.00 31.95 Flattush, N. Y., 1848-82 47.55 1871-75 32.11 1880-84 628 20.00 31.95 Flattush, N. Y., 1848-82 47.55 1871-75 32.11 1880-84 628 20.00 31.95 Flattush, N. Y., 1861-65 41.88 1871-75 32.11 187 1880-84 628 20.01 32.01 1871-75 32.11 1880-84 628 20.01 1871-75 32.11 1880-84 628 20.01 32.01 1871-75 32.11 1880-84 628 20.01 32.01 1871-75 32.11 1880-84 628 20.01 32.01 1871-75 32.11 1880-84 628 20.01 1871-75 32.11 1880-84 628 20.01 1871-75 32.11 1880-84 628 20.01 1871-75 32.11 1880-84 628 20.01 1871-75 1880-84 628 20.01 1871-75 1880-84 628 20.01 1871-75 1880-84 628 20.01 1871-75 1880-84 628 20.01 1871-75 1880-84 628 20.01 1871-75 1880-84 628 20.01 1871-75 1880-84 60.10 1870-74 62.23 1880-84 60.16 1870-74 62.25 14.91 1880-84 60.16 1870-74 62.25 14.91 1880-84 60.16 1870-74 62.25 14.91 1880-84 60.16 1870-74 62.25 14.91 1880-84 60.16 1870-74 62.25 14.91 1880-84 10.01 1.678 41.84 39.12 1870-74 62.25 14.91 1880-84 10.01 1.678 41.84 39.12 1870-74 62.25 14.91 1880-84 10.01 1.678 41.84 39.12 1870-74 62.25 14.91 1880-84 10.01 1.678 41.84 39.12 1870-74 1850-64 60.16 1870-74 62.25 14.91 1880-84 10.01 1.678 41.84 39.12 1870-74 1850-64 60.16 1870-74 62.25 14.91 1880-84 10.01 1.678 41.84 39.12 1870-74 1850-84 10.01 1.678 41.84 39.12 1870-74 1870-7	Angusta, Me.;	1846-50	48.55	1871-75	36.62	11.93	1880-84	1.008	296	23 36	7.26	-	191
Brattleboro', Vt., 1841-46 43.50 1871-76 30.43 13.07 1878-83 651 124 22.50 McLean, Mass., 1823-27 40.69 1871-75 21.66 18.91 18.94 421 123 22.50 Taunton, Mass., 1859-63 43.46 1871-76 23.11 20.35 1880-84 421 1890-84 1318 296 22.46 Butter Hospital, 1859-63 43.46 1871-75 23.11 20.35 1880-84 635 194 30.01 Butter Hospital, 1829-33 1870-74 32.57 18.89 1880-84 635 194 30.05 Harter Mospital, 1826-30 47.55 1871-75 32.31 18.99 18.90 31.95 187.76 Platowing Liu, N. Y., 1848-65 43.17 1871-75 32.33 18.94 635 20.24 18.23 Platowing Liu, N. Y., 1866-65 43.17 1871-75 31.37 1880-84 45.3 31.8 18	Concord, N. H.,	1848-52	46.92	1872-76	32.97	13 95	1880-84	623	158	25.36	19.2	ı	21.5
McLean, Mass., 1823-27 40.69 1871-75 21.66 19.03 1880-84 421 123 29.22 Worcester, Mass., 1839-43 48.69 1871-75 29.75 18.84 1880-84 4.21 18.91 294 20.01 Taunori, Mass., 1854-68 39.78 1871-76 35.57 4.21 1880-84 633 194 30.24 Butler Hospital, 1829-33 57.40 1871-75 32.33 10.84 633 194 30.58 Blouningdule, N. Y., 1828-62 43.17 1871-75 32.33 10.84 635 109 30.20 Titia, N. Y., 1861-65 41.88 1871-75 32.11 1877 1880-84 2.071 33 11.57 Flatbush, N. Y., 1861-65 41.88 1871-75 33.11 1877 1880-84 2.071 33 11.28 Flatbush, N. Y., 1861-65 41.88 1871-75 33.11 11.47 1880-84 2.071 33	Brattleboro', Vt.,	1841-46	43.50	1871-76	30.43	13.07	1878-83	651	124	22.50	7.93		21.0
Worcester, Mass. 1839-43 48 69 1871-76 29,76 18.84 1,319 264 20,01 Butter Hospital, 1859-63 43.46 1871-76 23.51 1880-84 1,318 296 22.48 Butter Hospital, 1859-63 43.46 1872-76 23.11 1880-84 453 162 35.76 Harford Retreat, 1826-30 47.55 1871-75 32.51 18.09 4.53 162 35.76 Homoningule, N. Y., 1826-30 47.55 1871-75 32.11 1880-84 45.3 162 35.76 Flatbush, N. Y., 1861-65 41.88 1871-75 33.11 11.77 1880-84 2,071 336 16.22 Platbush, N. Y., 1861-65 41.88 1871-75 33.11 147 1880-84 2,071 336 16.22 Platbush, N. Y., 1861-65 41.88 1871-75 33.11 147 1880-84 2,071 336 16.22 33.11 Pentsoh, N.	McLean, Mass.,	. 1823-27	40.69	1871-75	21.66	19.03	1880-84	421	123	20.22	1	2.56	11.4
Taunton, Mass, H859-63 43.46 1871-76 23.11 20.35 1880-84 1,318 296 22.46 Butter Hospital, 1854-68 39.78 1870-74 35.57 4.21 1880-84 635 194 30.55 Bloouingdule, N. Y., 1829-33 47 55 1871-75 32.55 15 00 1880-84 635 194 30.75 Bloouingdule, N. Y., 1848-62 43 75 1871-75 32.55 15 00 1880-84 635 200 31.95 Plathul, N. Y., 1848-65 43 18 1871-75 32.33 10.34 1880-84 635 200 31.95 Plathul, N. Y., 1861-65 42.79 1871-75 31.32 11.47 1860-84 635 200 31.95 Pennsylvania Hospital, 1860-65 51.59 1871-75 30 7.86 42.79 1872-76 31.87 1880-84 653 20 22.31 Catonsylle, Ma, 1860-64 60.16 1871-75 40.83<	Worcester, Muss.,	1839-43	48 59	1871-75	29.75	18.81	1880-84	1.319	564	20.01	9.74	1	28.5
Butler Hospital, 1854-58 39.78 1872-76 35.57 4.21 1880-84 635 194 30.55 Blantler Hospital, 1829-33 476 1870-74 1892-81 18.09-84 653 194 30.55 Bloomingdule, N. Y., 1826-30 476 1870-74 1890-84 626 626 200 3195 Trenton, N. Y., 1861-65 41.8 17 1871-75 32.33 10.84 1880-84 2,071 336 16.22 Flatbush, N. Y., 1861-65 41.8 1871-75 32.11 8.77 1880-84 2,071 336 16.22 Brantler Hospital, 1861-65 11.0 1871-75 32.11 18.77 1880-84 973 32.8 37.1 1880-84 973 32.8 37.1 1880-84 973 32.8 37.1 1880-84 973 32.8 37.1 1880-84 973 32.8 37.1 1880-84 973 32.8 37.1 1880-84 973 32.8 37.1 1880-84 97.1 1	Taunton, Mass	1859-63	43.46	1871-75	23.11	20.35	1880-84	1,318	796	22.48	39:	ı	21.0
Harford Retreat, 1829-33 57.40 1870-74 39.21 18.19 1880-84 453 162 35.76 Bloomingdule, N. Y., 1828-33 47.10 1870-74 39.21 18.19 1880-84 453 162 35.76 18.00 31.95 18.00	Butler Hospital,	1854-58	39.78	1872-76	35.57	4.21	1880-84	635	161	30.55	5.02	•	8.5
Bloomingdule, N. Y., 1826-39 47 55 1871-75 32.55 15 00 1880-84 522 200 31.95 17 1848-52 1883-84 5.02 1880-84 5.02 50 510 30.20 510 1880-84 5.02 510 30.20 510 30.20 510 30.20 510 30.20 510 31.95 1883-84 51.77 1880-84 5.07 510 30.02 510 30.02 510 510 510 510 510 510 510 510 510 510	Hartford Retreat,	1829-33	57.40	1870-74	39.21	18.19	1880-84	453	162	35.78	3.45	ı	21.6
Titica, N. Y., 1848-52 43 17 1871-76 32.33 10.84 1860-84 2,020 610 30.20 Flathush, N. Y., 1861-65 41.88 1871-75 33 11 8.77 1880-84 2,071 33 00 Trentous, N. J., 1853-67 41.88 1871-75 33 11 8.77 1880-84 2,071 33 00 Pennsylvania Hospital, 1846-50 51.10 1871-75 42 30 8 90 1880-84 973 32 3 37 1 Dixmont, Penn, 1839-43 317.78 1871-75 40.83 11.77 1880-84 973 32.83 37 1 Catonsville, Md., 1850-64 46.63 1871-75 40.83 11.47 439 38.27 Dayton, O., 1860-64 60.16 1870-74 45.25 14.91 1880-84 40.10 1,486 397 Jacksonville, Ill., 1855-69 45.53 1869-74 31.66 1869-84 1,486 399 27.42 Mendota, Wis.,	Bloomingdale, N. Y.,	1826-30	47 55	1871-75	32.55	15 00	1880-84	626	200	31.95	9	•	15.6
Flatbush, N. Y., 1861-65 4188 1871-75 33 11 8.77 1860-84 2,071 336 16.22 17 renton, N. J., 1833-74 1846-50 61.10 1871-75 33 11 8.77 1860-84 836 221 30.02 Penasylvania Hospital, 1861-65 37.78 1871-75 30 01 7.77 1880-84 973 216 22.31 37 1880-84 973 216 22.31 1873-43 1860-64 1860-64 1860-64 1860-64 1860-64 1860-64 1871-75 1880-84 1880-84 11.47 1880-84 11.47 1880-84 11.47 1880-84 11.47 1880-84 11.47 1880-84 11.47 1880-84 11.48 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-57 1833-84 11.47 1870-84 11.48	Utica, N. Y.,	1848-52	43 17	1871-75	32.33	10.84	1880-84	2,020	610	80 80	2.13	ı	129
Trenton, N. J., 1853-67 42.79 1872-76 31.32 11.47 1880-84 836 251 30.02 Pennsylvania Hospital, 1846-60 51.10 1871-75 42.30 8 40 1880-84 973 328 3371 Dixmonic Penn, 1861-65 37.78 1871-75 40.83 10.76 1880-84 973 32.8 371 Catonsville, Md., 1860-64 46.63 1871-75 40.83 10.76 1880-84 656 209 31.86 Davion, O., 1860-64 60.16 1870-74 42.25 14.91 1880-84 4,010 1,47 439 38.27 Jacksonville, Ill., 1853-67 67.26 1871-76 52.48 4.78 1890-84 4,010 1,678 4184 Jacksonville, Ill., 1855-69 33.82 1871-76 52.86 7.36 1890-84 1,021 280 27.42 Jacksonville, Ill., 1865-69 33.82 1871-76 25.86 7.36 1890-	Flathush, N. Y.,	. 1861-65	41.88	1871-75	33 11	8.77	1880-84	2,071	336	16.22	16.89	ı	25.6
Pennsylvania Hospital,	Trenton, N. J.,	1853-67	42.79	1872-76	31.32	11.47	1880-84	836	251	30.05	1 30	1	12.7
Dixmont, Penn, 1861-65 37.78 1871-75 30 01 7.77 1880-84 656 22.31 1871-75 1880-84 18.55 18.50 18.55 18.50 18.55 18	Pennsylvania Hospital,	1846-50	61.10	1871-75	42 30	88	1880-84	973	328	33 71	8.59	ı	173
Catonsville, Md,	Dixmont, Penn.,	186165	37.78	1871-75	30 01	7.77	1880-84	368	216	22.31	7.70	1	154
Newhurg, O.,	Catonsville, Md.,	1839-43	51 59	1871-75	40.83	10.76	1880 84	636	508	31.86	8.97	,	19.7
Dayton, Ö., 1860-64 60.16 1870-74 45.25 14.91 1880-84 910 337 37.03 Indianapolis, Ind., 1853-46 45.23 1871-76 52.48 4.78 1890-84 4.010 1,678 41.84 Jacksonyille, Ill., 1855-69 33.32 1871-75 25.86 7.96 1880-84 1,021 280 27.42 Mendota, Wis., 46.08 46.08 34.26 11.82 23.052 6,896 29.91	Newburg, O	1860-64	46.63	1871-76	30.03	16.60	1880-84	1.147	439	38.27	ı	8.24	æ
Indianapolis, Ind., 1853-57 67.26 1871-76 52.48 4.78 1880-84 4,010 1,678 41.84 Jacksonville, III., 1855-69 46.58 1869-74 31.86 1860-84 1,021 280 27.42 Mendota, Wis., 1865-69 46.08 46.08 34.26 11.82 23,052 6,896 29 91	Davton, O.,	1860-64	90.16	1870-74	45.25	14.91	1880-84	910	337	37.03	8.22	ı	23.1
Jacksonville, III., 1855-60 46.53 1869-74 31.96 14.57 1879-84 1,486 393 28.58 Mendota, Wis., 1865-69 33.82 1871-75 25.86 7.96 1880-84 1,021 280 27.42 Totals and mean per cent., 46.08 46.08 34.26 11.82 23,052 6,896 29 91		1853-57	67.28	1871-76	52 48	4.78	1880-84	4.010	1,678	41 84	10.64	1	154
Mendota, Wis.,		1855-60	46.53	1869-74	31.96	14.57	1879-84	1,486	393	28.58	2.38	1	19 95
Totals and mean per cent.,		. 1865-69	33.82	1871-75	25.86	2.98	1880-84	1,021	280	27.42	ı	1.56	6.4
	Totals and mean 1		46.08		34.26	11.82		23,052	968'9		4.35		16.17
	<u></u>	· · · · · · · · · · · · · · · · · · ·					1	-		[- 1

The aggregate admissions in the course of this third period is 23,052; the aggregate recoveries, 6,896; and the proportion of recoveries, 29.91 per cent. of the admissions,—a result which demonstrates that the reported recoveries have continued to diminish, during the last eight years, in very nearly the same annual ratio as they had diminished between the first and the second period.

The following is a summary of the results of the whole investigation:—

Recoveries in the first period, 46.08 per cent. of the admissions.

Recoveries in the second period, 34.26 per cent. of the admissions.

Recoveries in the third period, 29.91 per cent. of the admissions.

Decrease of recoveries from first to second periods, 11 82 per cent. of the admissions.

Decrease of recoveries from second to third periods, 4.35 per cent. of the admissions.

Total decrease of recoveries from first to third periods, 16.17 per cent. of the admissions.

The decrease of recoveries from first to second periods is 25.66 per cent. of the recoveries of the first period.

The decrease of recoveries from second to third periods is 12.69 per cent. of the recoveries of the second period.

The total decrease from the recoveries of the first period is equal to 35.09 per cent. of the recoveries of the first period.

The numbers of the insane subjected to treatment being hypothetically the same at the three periods, then, for each hundred (100) that recovered in the first period only seventy-four (74.34) recovered in the second period, and only sixty-five (64 91) recover now.

The proportion of recoveries between the last two periods, from 1879 to 1884, did not diminish at all of the twenty institutions. At three of them it increased. At the McLean Asylum this increase was 7.56 per cent. of the admissions; at the Newburg, Ohio, hospital, it was 8.24 per cent.; and at the Mendota, Wisconsin, hospital, 1.56 per cent. But notwithstanding this augmentation, the actual decrease from

the proportion recovered in the first period, at those three institutions, is still 11.47, 8.36, and 6.40 per cent., respectively.

The decrease from the second to the third period, and the total decrease from the first to the third period, at each of the 17 other institutions, may be learned from the last two columns of the table. The decrease is more than one-half at the Worcester and the Flatbush hospitals; very nearly one-half at Brattleboro' and Taunton; and more than one-third at Augusta, Concord, Hartford, Pennsylvania Hospital, Dixmont, Catonsville, Dayton and Jacksonville.

STATISTICS OF ONE YEAR AT FIFTY-EIGHT AMERICAN INSTITUTIONS.

For the purpose of ascertaining the extent to which the results of one year of the current work at American institutions would enlighten us upon the subject of curability, I have collected and herewith present, in Table VII., the statistics of fifty-eight of them, taken, in fifty-one instances, from the reports for 1884. Of seven of the hospitals the reports are biennial, and consequently contain the results for two years each. In four instances the report from which these results were taken ended in 1884; in one instance in 1883, and in two in 1882.

I am well aware of the many influences, both favorable and unfavorable, which may, and often do, modify the number of recoveries, as well as of deaths, in public institutions, and which necessarily render the results of any one year unreliable as a test or measure of the work of a series of years, at any individual hospital. But at a large number of institutions on any given year, these influences would probably very nearly balance one another, and consequently the aggregate results would fairly represent the mean or average of the same group of institutions for a much greater length of time.

Table VII. — One Year at Fifty-Eight American Institutions.

INSTITUTION.	State.	Year,	Admitted.	Recov- ered.	Per cent. of Recov- eries.	Died.	Per cen of Deaths
Augusta,	Me.,	1884	203	59	29.06	101	49.7
Concord,	N. H.,	1884	141	18	12.77	24	17.09
Brattleboro',	Vt., .	1884	82	23	28.05	29	35.36
McLean, Worcester,	Mass., . Mass., .	1884 1884	113 252	34 53	30 09 21.03	17 57	15.04 22.62
Northampton,	Mass.,	1884	136	25	18.38	25	18.38
Taunton,	Mass,	1884	283	85	30.01	65	22.97
Danvers,	Mass,	1884	530	96	18.11	101	19 06
Boston, City,	Mass., .	1884	121	34	28 10	32	26.45
Butler,	R. I., .	1884	106	46	43.40	13	12 26
Hartford Retreat,	Ct.,	1884	97	37	88.14	18	18.56
Middletown, .	Ct.,	1884	271	72	28.57	80	29.52
Bloomingdale,	Ct., . Ct., . N. Y., .	1884	136	55	40.44	27	19.83
Flatbush,		1884	479	47	981	•101	21.09
Utica,	N. Y ,	1884	372+	89	23.92	56	15 03
Buffalo,	N. Y.,	1884 1884	275	80	29.09	43	15.63
Trenton, Morristown,	N J., . N. J.,	1884	175 210	52 37	29.71 17.62	64 57	36.57 27.14
Penna. Hos., .	Pa., .	1884	203	51	25.12	40	19.70
Harrisburg,	Pa., .	1884	128	23	17.97	36	28.12
Dixmont,	Pa.,	1884	189	28	14 81	69	36.50
Danville,	Pa., .	1884	201	37	18.41	29	14.42
Norristown,	Pa.	1884	356	92	25 84	96	26 96
Warren,	Pa, .	1884	203	36	17.73	46	22 66
Catonsville,	Md	1884	95	29	30.53	30	31.57
Mount Hope, .	Md.,	1884	169	77	45.56	45	26 62
Washington, .	D. C., .	1884	347	79	22.77	67	19.30
Staunton,	Va, .	1884	133	55	41.35	36	27.06
Richmond,	Va	1884	119	97	81.51	61	51 26
Weston,	W.Va,.	1884 1844	176	74 26	42.05	39 11	22.13
Raleigh, Goldsboro'	N. C., . N. C., .	1884	106 81	26 26	24.53 32 10	11	10.37 17.28
Morganton,	N. C.,	1884	71	20 31	43.66	9	12.67
Columbia,	s. c.,	1884	293	72	24.57	143	48.80
Austin	Texas.	1884	254	66	25.98	41	16.14
Little Rock,	Ark's, .	1884	82	42	51.22	21	25.6
Nashville,	Tenn., .	1882-84	222	67	30.18	62	27.9
Columbus,	Ohio, .	1884	282	164	58 16	59	20.9
Newburg,	Ohio, .	1884	220	87	39.55	37	16 8
Dayton,	Ohio, .	1884	188	60	31.91	37	19.60
Athens,	Ohio, .	1884	223	96	43.05	63	28.23
Longview,	Ohio,	1884 1884	220 908	56 329	25.45	58 112	26.36
Indianapolis, . Pontiac,	Ind., . Mich., .	1884	192	62	36.23 32.29	29	12.3
Kalamazoo,	Mich.,	1884	174	17	9.77	9	5.1
Jacksonville, .	III.,	1884	240	56	23.33	32	13 3
Elgin,	iii.,	1884	123	38	30.89	21	17.0
Anna,	111.,	1884	220	67	30.45	33	15.0
Kankakee,	III., .	1884	291	48	16 49	31	10.6
Mendota,	Wis., .	1884	239	58	24.27	30	12.5
Oshkosh,	Wis.,* .	1883-84	601	148	24.63	115	19.1
Mt. Pleasant, .	lowa,* .	1882-83	534	120	22.47	98	18.3
Independence, .	Iowa, .	1883	233	38	16.31	34	14.5
St. Peter,	Minn ,*.	1883-84	595	143	24.03	82	13.78
Rochester,	Minn.,*.	1883-84	299	55 175	18 :9	43	14.38
Fulton, St. Joseph,	Mo.,* Mo.*	1881-82 1881-82	364 316	175 110	48 08 34.81	113 49	31.04
Napa,	Cal.	1884	500	130	26.00	90	15.51 18.00
pa,		1001		100	20.00		10.00
Totals and mean							1
per cent., .	i –	-	14,372	4,007	27.88	2,980	20 74

[·] Biennial.

The aggregate of patients admitted at these fifty-eight institutions, in the course of the time specified, is 14,372; the aggregate of recoveries, 4,007; and the proportion of recoveries, calculated upon the admissions, 27.88 per cent., or a trifle more than one-fourth. The least relative number of recoveries, 9.77 per cent., was at Kalamazoo; and the largest, 81.51 per cent., at Richmond.

In the following schedule the hospitals are arranged in groups, according to the proportion of their recoveries, each group differing five per cent., from the one above or below it.

Below 10 per cent., . Flatbush and Kalamazoo.

From 10 to 15 per cent., Concord and Dixmont.

1885.7

From 15 to 20 per cent., Northampton, Danvers, Morristown, Harrisburg, Danville, Warren, Kankakee, Independence and Rochester.

From 20 to 25 per cent., Worcester, Utica, U. S. Gov't Hospital, Raleigh,
Columbia, S. C., Jacksonville, Mendota, Oshkosh, Mt. Pleasant and St. Peter.

From 25 to 30 per cent, Augusta, Brattleboro', Boston, Middletown, Ct.,
Buffalo, Trenton, Penna Hospital, Norristown, Austin, Longview and Napa.

From 30 to 35 per cent., McLean, Taunton, Catonsville, Goldsboro', Nashville, Dayton, Pontiac, Elgin, Anna and St. Joseph.

From 35 to 40 per cent., Hartford Retreat, Newburg and Indianapolis. From 40 to 45 per cent., Butler, Bloomingdale, Staunton, Weston, Morganton and Athens.

From 45 to 50 per cent., Mount Hope and Fulton.

From 50 to 55 per cent., Little Rock. From 55 to 60 per cent., Columbus.

Over 80 per cent.,. Richmond.

If there be no mistake in the record from the Virginia Central Asylum, at Richmond, that institution, so far as my knowledge extends, has exceeded every other of its kind, not in America alone but upon the whole surface of the earth, in the proportion of its recoveries. Forty years ago, it was doing well to report the recovery of eighty per cent. of recent cases. At the present time, it is rare that even sixty per cent. are so reported, and the average in the United States, as we have just seen, is below forty per cent. But here we are confronted with a proportion of 81.51 per cent. of recoveries of all the cases admitted! The moral to be derived herefrom appears to be, that, if any person yet

unborn be blessed with the pre-natal power of forcordination of his own physical organization, and desires to recover in case he be afflicted with insanity, he should elect to be born a negro.*

There is yet another useful moral to be derived from the case. At the Danvers Hospital, which, before it went into operation, had cost more than \$3,500 for every patient for whom its accommodations were calculated, and more than \$2,500 for each of the seven hundred patients who have been crowded into it, the per cent. of recoveries was 18.11. At the Richmond Hospital, which apparently could not have cost over \$100, and probably not more than \$50, per patient, the recoveries were equal to 81.51 per cent. The moral is so conspicuously obvious, that it would be a work of supererogation to repeat it.

In Table VIII., the fifty-eight hospitals and their statistics are grouped according to the States in which they are respectively situated.

TARTE	VIII	State	Groups.	One	Vear
TABLE	V 111. —	- Dime	Groups.	Une	ieur.

STATE.	No. of Hospi- tals.	Admissions.	Recov- eries.	Per cent. of Recoveries	Died.	Per cent. of Deaths.
Maine, . New Hampshire, Vermont, . Massachusetts, Rhode Island, Connecticnt, New York, New Jersey, Pennsylvania, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Texas, Arkansas, Tennessee, Ohio, Michigan, Indiana, Illinois,	1 1 6 1 2 4 2 6 2 1 2 1 3 1 1 1 1 5 2 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	203 141 82 1,435 106 368 1,262 385 1,280 264 347 252 176 258 293 254 82 222 1,133 366 908 874	59 18 23 327 46 109 271 89 267 106 79 152 74 83 72 66 42 67 463 79 329 209	29.06 12.77 28.05 22.79 43.40 29.62 21.47 23 12 20.80 40.15 22.77 60 31 42.05 32.17 24 57 25.98 51.22 30.18 40 86 21.58 36.23 32.39	101 24 297 13 98 227 121 316 75 67 97 34 141 21 62 254 38 112	49.75 17.02 35.36 20.69 12.25 26.63 17.99 31 15 24.69 28.41 19.31 38.49 22.15 13.18 48.80 16.14 25.61 27.93 22.41 10.38 12.33 13.33
Wisconsin,	2 2 2 2 1	840 767 894 680 500	206 158 198 285 130	24.52 20.60 22.14 41.91 26.00	145 132 125 162 90	17.26 17.21 13.98 23.82 18.00
Totals and mean per cent.	58	14,372	4,007	27.88	2,980	20.74

^{*} The Virginia Central Asylum is for colored persons.

The proportion of recoveries was the smallest in New Hampshire, and that proportion increased in the other States in the following order: Pennsylvania, Iowa, New York, Michigan, Minnesota, District of Columbia, Massachusetts, New Jersey, Illinois, Wisconsin, South Carolina, Texas, California, Vermont, Maine, Connecticut, Tennessee, North Carolina, Indiana, Maryland, Ohio, Missouri, West Virginia, Rhode Island, Arkansas and Virginia.

If the statistics of recoveries be arranged in accordance with the groups popularly called the Eastern, the Middle, the Southern, and the Western States, the results are as follows:—and to them are appended the percentage of deaths, calculated, like the recoveries, upon the number of patients admitted.

In the Eastern States the total of admissions was 2,335; the total of recoveries, 582; and the proportion of recoveries, 24.92 per cent. The number of deaths was 562, and the proportion, 24.07 per cent. The number of recoveries exceeded that of deaths by only 20.

In the Middle States the number of admissions was 2,927; the number of recoveries, 627; and the proportion of recoveries, 21.42 per cent. There were 664 deaths, equal to a percentage of 22.69. The deaths have a majority of 37 over the recoveries; and the proportion of both recoveries and deaths is less than in the Eastern States. It has been suggested in one of the criticisms of a psychological periodical, that the small ratio of recoveries in Massachusetts is a consequence of the published writings of the superintendent of one of the hospitals in that State. As, according to these statistics, the proportion of recoveries is less in the Middle States than in Massachusetts, the proposition now is,—

Whose published writings were the cause of it?

In the Southern States 1,844 patients were admitted; and 632, or 34.27 per cent., recovered. The total of deaths was 496, or 26.90 per cent. The proportion of recoveries is nearly ten per cent. on the admissions in excess of those of the Eastern States; and that of deaths nearly three per cent. The proportion of recoveries is considerably increased by the statistics of the Richmond Asylum. If those statistics be set aside, and the computation made upon the returns from the

other Southern institutions, the results are: Admissions, 1,725; recoveries, 535; per cent. of recoveries, 31.21. Deaths, 435; per cent. of deaths on admissions, 25.21.

In the Western States the admissions were 7,266; the recoveries, 2,166; and the proportion of them 29.81 per cent. Of deaths there were 1,258, or a proportion of 17.31 per cent., which is more than five per cent. of the admissions less than in either of the other sections.

Arranged in accordance with the *increasing* ratio of recoveries, that is, from lowest to highest, the sections stand as follows: Middle, Eastern, Western, Southern; and in accordance with the *decreasing* ratio, from highest to lowest, of deaths, as follows: Southern, Eastern, Middle, Western.

These results are derived from the work of but a single year, and hence are unreliable as an established formula. By the extension of the investigation over a sufficient series of years, something more reliable might be obtained. Then, and not now, will be the time to speculate upon the causes of the differences.

STATISTICS OF PENNSYLVANIA HOSPITALS.

The table to which attention is now requested includes statistics of the seven hospitals in Pennsylvania, during a period of five years each, with the exception of that at Warren, which is of but four years. At all of them the period ended in, or with, the year 1884.

		Admitted.	Recov- eries	Per cent. of Recoveries.	Died.	Per cent. of Deaths.
Frankford,	1880-84	196	58	29.59	39	19 90
Penna. Hospital, .	"	973	328	33.74	147	15.11
Dixmont,	44 44	968	216	22.31	277	28.61
Harrisburg,	46 44	772	121	15.97	174	22.54
Danville	" "	720	114	15.83	118	16.39
Norristown	44 44	1,458	275	18.86	290	19.89
Warren,	1881-84	847	92	10.86	113	13.34
Totals and mean per cent., .	_	5,934	1,204	20.29	1,158	19.51

TABLE IX. — Pennsylvania Hospitals.

The whole number of cases admitted was 5,934; the total of recoveries, 1,204; and the proportion of recoveries, 20.29 per cent. But Norristown and Warren are both new hospitals, and in their first years received many transfers from other institutions. Hence they are unfairly represented. We will therefore permit the statistics of only the last two years at these institutions to enter into the computation, retaining, for the others, the full period of five years. Those statistics are as follows:—

		Admitted.	Recov- ered.	Per cent. of Recoveries.	Died.	Per cent. of Deaths.
Norristown, . Warren, .	1883-1884 1883-1884	777 388	195 70	25.09 18.04	219 80	28.18 20.62
Totals and mean per cent., .	_	4,794	1,102	22.98	1,054	21.98

By a substitution of these figures for those contained in the next preceding table, it will be found that the whole number of admissions is 4,794; the number of recoveries, 1,102; and the proportion of recoveries, 22.98 per cent., or a gain of 2.69 per cent. on the admissions, by the change.

At the four State Hospitals of Massachusetts, the proportion of recoveries in the three fiscal years ending in 1882, and the statistics of which form the basis of an article on curability in the annual report of this hospital for that year, was 22.25 per cent. This is seventy-three hundredths (.73) of one per cent. less than that of the Pennsylyania hospitals, according to these statistics. But this difference is more than counterbalanced by the fact that the Massachusetts statistics relate to persons only, while those of Pennsylvania relate to cases. In the latter all duplicate, triplicate and multiplicate recoveries are included, while in the former they are all rejected.

By the first of the two tables the deaths were 1,158, and their proportion on the admissions, 19.51 per cent. By the last table they were 1,054, and their proportion, 21.98 per cent., or an increase of 2.47 per cent. This increase is a natural result, as deaths are generally comparatively few in the first two or three years of a hospital's operations.

TESTIMONY OF THE DANVERS HOSPITAL.

The experience at the newest State institution in Massachusetts is both instructive and disappointingly interesting, in the light which it throws upon the curable, or rather the incurable, condition of a great mass of the insane of the present epoch in this State.

The Danvers Hospital was opened for the reception of patients on the 18th of May, 1878; and, during the last four or five years, it has been directed by the highest grade of medical ability. It is, emphatically, one of those establishments upon which a flood of money has been poured, for the purpose of creating a curative institution as nearly perfect as possible under the light of existing knowledge. If abundance of pecuniary means in construction, together with what was believed to be the highest embodied ideal of architectural arrangements, could cure insanity more rapidly than a less costly and more simple structure, that hospital, most assuredly, was prepared for a demonstration of the proposi-It was evident, in its earliest years, that great efforts were made to arrive at such a demonstration, and thus prove that the curative advantages of the institution were an adequate, or - since the value of reason restored is not to be measured by dollars and cents - more than adequate compensation for the excess of expenditure. The usual custom of a large transfer of chronic and incurable cases from older hospitals or asylums to the new one, was here omitted, and the supply of patients was derived chiefly from current commitments. By this means the proportion of recent cases was much higher than usual from the first; and as Boston and five other large centres of population - which usually furnish a larger ratio of recent cases than the rural districts - are within a comparatively short distance from it, that proportion was raised still higher.

The fiscal year of the State institutions terminated four and one-half months after the hospital was opened. During this period 305 patients were admitted; and 26, or 8.82 per cent., discharged recovered. In the course of the next—1878-79—fiscal year, 653 were admitted; and 115, or 17.61 per cent., discharged recovered. In 1879-80 the admissions

were 581, and the discharge of recoveries 165, making the percentage of the latter 28.40. At this point the proportion of recoveries stopped upon its ascending scale, and took a retrograde direction. In 1880-81 the admissions were 497, the recoveries discharged 124, and the percentage 24.95; in 1881-82, admissions 512, discharged recoveries 89, percentage 17 38; in 1882-83, admissions 488, discharged recoveries 80, percentage 16.39; and in 1883-84, admissions 530, discharged recoveries 96, and the percentage of the latter 18.11.

The whole number of admissions, during the six years and four and one-half months, was 3,566; and that of discharged recoveries 695, or an equivalent of 19.49 per cent. In the first three full fiscal years, the admissions were 1,731, the discharged recoveries, 404, and the per cent. of the latter 23.34; and in the last three fiscal years, admissions 1,530, discharged recoveries 265, per cent. of recoveries 17.32. In the first period of three years, the deaths were 240, or 13.86 per cent. of the admissions; and in the last period 285, or 18.63 per cent. of the admissions. In the first period the deaths were 240, a per cent. of 59.4 on the recoveries; and in the last period, they exceeded the recoveries by 20, the deaths being to the recoveries as 57 to 53.

The new formulæ for statistics in Massachusetts give the ability still further to illustrate the character of the recovcries, - an ability rendered by the reports of no other State in the Union. The new tables were adopted in 1879, and first used in the reports for 1879-80. In the course of the five fiscal years ending Sept. 30, 1884, 554 patients, or cases, were discharged recovered from the Danvers Hospital; but 115 persons, who had been discharged recovered a total of 121 times, had returned to it. Within the last three years, - which are included in the foregoing years, - the discharged recoveries were 265; but, during the same time, 80 persons, representing 86 of those recoveries, were readmitted. So far as the community is concerned, these recoveries offset, or cancel, the same number of the discharged recoveries, and the added recoveries in the population, instead of being 265, are 265 minus 86, or 179, a diminution of about one-third, and only 11.70 per cent. on the number of admissions during that period. Digitized by Google

READMITTED RECOVERIES IN MASSACHUSETTS.

The annual report of this hospital for the fiscal year 1881-82, contains an article on the statistics of the State Hospitals of Massachusetts during the three years which had then elapsed since the adoption of the new series of tables. I desire to call attention to some points in the statistical history of recoveries, as illustrated by the same hospitals, during the two years since that article was published. For this purpose a table is here introduced which shows, for the fiscal years 1882-83 and 1883-84:—

- 1st. The number of persons admitted who had previously been discharged recovered;
 - 2d. The number of times they had previously recovered;
 - 3d. The ratio of recoveries to persons; and
- 4th. The number of persons discharged recovered during those two years, at each of the four hospitals aforesaid.

			Admissions.		DISCHARGES.
HOSPITALS.		Persons Admit- ted who had previously been Discharged Re- covered.	No. of times they had Recovered.	Ratio of Re- coveries to Persons.	
Worcester, Taunton, Northampton,	:	43 64 21 49	118 147 39 54	2 73 2.29 1.85 1.1	109 145 58 176
Totals,		177	358	2.02	483

TABLE X. — Two Years at Massachusetts Hospitals.

The number of persons admitted who had previously been discharged recovered, was 177; and they had been discharged recovered a total of 358 times. There were 181 more recoveries than persons. In other words, the number of recoveries was four more than twice as great as the number of persons. Each person had recovered, as a mean or average number, 2.02 times. Regarded, during the last two years, from a debt and credit point of view, those four institutions cancelled, by taking back from the general population, no less than 358 recoveries for which they had been credited.

During the same time they discharged recovered, 483 persons, which is only 125 more than the *recoveries* (not persons) which they had taken back.

Summary. A brief résumé of the most important results of the foregoing studies, expressed in the percentages of recoveries, may be found convenient for reference.

- 1. Cases of first attack; duration less than three months.
- a. Earle's 8,316 cases, at 23 British asylums. Recoveries 48.71 per cent.
- b. Chapman's 38,283 cases, at 46 British asylums. Recoveries 48.72 per cent.
 - 2. Cases of first attack; duration less than twelve months.
- a. Earle's 10,929 cases, at 23 British asylums. Recoveries 44.06 per cent.
- b. Chapman's 50,409 cases, at 46 British asylums. Recoveries 43.79 per cent.
 - 3. Not first attack; duration less than twelve months.
- a. Earle's 4,768 cases, at 23 British asylums. Recoveries 55.37 per cent.
- b. Chapman's 19,574 cases, at 46 British asylums. Recoveries 58.61 per cent.

In neither of the three foregoing classes have we any American statistics, because our institutions, in the tabulation of their cases, make no discrimination which would render such a classification possible.

- 4. All cases of duration less than twelve months.
- a. Earle's 15,697 cases, at 23 British asylums. Recoveries 47.49 per cent.
- b. Chapman's 69,983 cases, at 46 British asylums. Recoveries 46.52 per cent.
- c. Earle's 8,063 cases, at 15 American institutions. Recoveries 38.59 per cent.
 - 5. All recoveries, calculated on all admissions.
- a Chapman's 93,448 cases, at 46 British asylums. Recoveries 37.95 per cent.
- b. Earle's 33,318 cases, at 39 [15+24] American institutions. Recoveries 29.15 per cent.
- c. Earle's 23,052 cases; 3d period at 20 American institutions. Recoveries 29.91 per cent.
- d. Earle's 14,372 cases; in one year at 58 American institutions. Recoveries 27.88 per cent.

It will be perceived that, so far as these statistics are an index, the recoveries in British asylums, both of recent cases and of all cases admitted, exceed the recoveries in the American institutions by between 8 and 9 per cent.

The most important general conclusions to be derived from the statistics included in this paper, are, first, that the old claim of curability in a very large majority of recent cases is not sustained, and that the failure to sustain it is more apparent and more striking than at any antecedent time; and, secondly, that the percentage of reported recoveries of all cases received at the hospitals in this country still continues to diminish.

It is believed that this diminution is, in part, to be attributed to the admission of a larger proportion of chronic cases, and of cases of greater degeneracy from their origin: in part, from the increasing though as there is good reason to believe still far from universal practice of not reporting as recoveries from insanity either mere restorations from a drunken debauch or forced temporary suspensions from habitual intoxication; and, in part, perhaps, from the adoption of a higher degree of improvement as the standard or criterion of recovery. It may be that there is still another cause of that diminution. Drs. Bucknill and Tuke, in their treatise upon insanity, mention what they call "cooked" statistics. It is possible that, in the United States, this class of published results is decreasing, and that the reported statistics are more generally given to the public in the spirit of a conscientious loyalty to scientific truth.

In conclusion I would express the hope, that the time is not far distant at which the American Association of Superintendents will so perfect its statistical system as to make a distinction between persons and cases, and enable the reader to learn how many of the reported recoveries are first recoveries and how many subsequent to the first. This improvement was made in the Massachusetts statistical tables, as already mentioned, in 1879; and in those of the British Medico-Psychological Association in 1883. Surely the American Association ought not to lag far behind in the matter.

CHRONOLOGY OF THE HOSPITAL.

- [N. B. The years are the calendar years, and not the official years of the hospital.]
- 1855. Legislative Act, authorizing the construction of the hospital by a board of three commissioners, approved by the Governor, May 21st.

Enos Clark lot bought, northeast corner of the farm; 24a. Deed executed Sept. 3. This lot was conveyed back to Mr. Clark and reconveyed to the Commonwealth, May 13, 1856.

William Parsons lot bought; 28a. 25r. Deed executed Sept. 4.

Samuel Day lot bought; 5a. 16r. Deed executed Sept. 4.

George Ellsworth's farm and buildings bought; 100a. 94r. Deed executed Sept. 5.

Samuel Phelps lot bought; 9a. 60r. Deed executed Sept. 6.

Silas D. Clark lot bought; 5a. 20r. Deed executed Sept. 6.

1856. Legislative Act, establishing a board of trustees, approved by the Governor, June 8.

July 4. Corner-stone laid.

July 4. First meeting of the board of trustees, at the Warner House.

1857. Oct. 1. Term of building commissioners expired.

Oct. 1. Trustees voted to proceed to complete the building.

1858. Feb. 19. By-laws, as reported by Mr. Boynton, adopted.

August. Hospital opened.

1859. The hospital was at first supplied with water by Mr. Damon, from his pond on Mill River.

March 16. A break occurred at the west end of Mr. Damon's dam, destroying the water power. Water was brought in barrels, and pumped into the tank, until the twenty-fifth of the month.

1860. A high, wooden, picket fence built next the county road, from the farm house westward.

Foundation walls for the barn laid.

A brick pump house, with boiler and pump, for forcing water to the hospital, was erected on the premises near Mr. Damon's dam. It stood until after water was taken from the public water works, and was then taken down.

1861. Five small lots of land bought, one-eighth of an acre each. Deed executed by William H. Prince, May 18.

July 31. The barn and the adjoining piggery are finished.

August 31. The coal-house is finished. This is the coal-house adjoining the boiler-room. Prior to its construction, a roadway, which was laid out around the whole building, passed over its site.

The bowling alley was erected this summer.

1862. The reservoir at the spring, southwest of the hospital, and on the premises, was made, and the adjoining pump house erected.

November. Cooking range and broiler put in the kitchen.

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- 1863. March 31. The water works at the spring are in successful operation. The power was a caloric engine, taken on trial. Several breakages had occurred. There were others afterwards, and, on the 5th of August, it was voted not to accept the engine.
- 1864. A new steam forcing-pump put into the house at the spring.

The four original flue steam boilers taken out, and replaced by tubular ones.

All the pipes for the distribution of water throughout the house were taken down and cleaned out.

The roadway at the main entrance from the county road graded down. This entrance was closed in the spring of 1869. It was half-way down the hill, east of the present entrance.

1865. Mattress making by the patients introduced.

Storeroom for groceries and meats fitted up, and an outside door opening directly into it made.

A storeroom for charcoal made in the north basement.

A paint shop and a storeroom for vinegar and soap made in the south basement.

Partitions made at the foot of the stairways, and across the halls leading to the laundry and the sewing-room.

Coal-house at the railroad built.

A painter hired as a permanent employee.

Hill east of lower or main entrance partly graded down.

Peat meadow lot bought of W. C. Rice; 1a. 90r. Deed executed Sept. 19.

Vestibules to the superintendent's apartments, on the second and third floors, partitioned off from the rotunda, and doors made from them into the bath-rooms.

Began to grade down the bluff next the county road, between the farm-house and the lower entrance.

Philosophical and chemical apparatus bought.

Storeroom for sand made in basement.

A steam whistle put in, the sound of the bell not being sufficiently loud for all purposes.

New road made in front of the north wing. The original road was much nearer the building, and extended around the wing.

1866. Two iron water tanks put in north attic. All the original tanks were of wood.

Hay-scales bought and put in place.

Chapel painted in water colors.

Doors put upon the staircases, between the third and fourth halls, both north and south.

An additional (fourth) steam boiler put in.

Iron settees put in the rotunda. Up to this time there had been no furniture, except the large boxes of plants, and no pictures in either of the three stories of the rotunda.

Two cylindrical iron water-tanks put in the attic of the south wing.

1867. Sewing-room doubled in size, and the dry-goods cases in it made.

Case made for philosophical apparatus.

New road finished across the lawn, in front of the south wing, and the old one closed.

Horse-chestnut trees set in front of the south wing.

Bath-rooms, lavatories, and water-closets of the south wing remodelled, and the ventilation improved.

Land for a depot for peat, or "meadow-muck," bought of William Foley; 80r. Deed executed June 18.

Carriage road made across west end of west meadow.

Floor of lower 3d hall, south, relaid. Nearly all of the hall floors were of maple, insufficiently seasoned. After this date, one or more of them was relaid every year, until 1877, when only one of the original floors of the twenty-four halls remained.

The brownstone piers, for a gateway at the upper entrance, were built.

1868. Iron gates at the main entrance put up. The former main entrance was closed in the spring of 1869.

Exchange of land with Samuel Day, reducing the number of boundary lines from five to two. Day's deed executed Sept. 30. (See Registry of Deeds, Book 255, p. 307.)

The stone wall of the south barnyard built.

Book-case, lower rotunda, north side, made; also nearly fifty wardrobes.

1869. Piggery removed twenty-nine feet westwardly, its height to the eaves increased eighteen inches, and the shed connecting it to the barn erected.

The capacity of the coal-house at the railroad was doubled by an extension.

Grading of the bluff, next the county road, finished, and a wooden picket-fence made from the main entrance to the foot of the hill.

Samuel Parsons lot, south of county road, bought; 7a., more or less. Deed executed June 5. (See Registry of Deeds, Book 262, p. 253; see, also, Book 263, p. 327.)

Curved iron fence at entrance gate put up.

Four additional cases, for books, etc., put into the rotundas.

New building, for laundry and other purposes, erected.

1870. New laundry put in operation in January. The old laundry was over the boiler-room and the engine-room.

A severe hail-storm, on the 20th of May, broke about five hundred panes of glass in the hospital building.

Barn remodelled. Cow stable changed from north to south side. The frame strengthened by larger timbers.

Carpenter's shop built on the walls of the coal-house. The old shop was in the basement of the south wing of the hospital.

Shop for engineer partitioned off from old laundry and carpenter's shop.

Screw-cutting and drill machines put in.

Two more iron water-tanks put in attic of north wing.

Gold's radiators put in the basement of the second sections of both wings.

Old clothes-drying room divided, making a room for the flatheater, and a lodging-room.

1871. Floor of old laundry, now lumber-drying room, relaid.

Cart shed built at the northwest corner of the bowling alley.



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Original heating apparatus taken out of the basement of the south wing, the four air-chambers united into one, the track of the railroad changed, and Gold's radiators put in.

Began to take water of the Northampton Water Works Co., December 25.

1872. Old blacksmith's shop, under superintendent's office, fitted up as a storeroom for groceries.

Walls of upper 4th hall, south, painted in oil. Since that time, and prior to 1884, the walls of all the patients' halls, dining-rooms and dormitories, have been similarly painted.

Floor of the middle rotunda relaid.

Sixteen fire hydrants placed in the wings, and four out of doors.

Cart shed extended across west end of bowling alley.

Old folding-room of the laundry divided by a permanent partition, and an outside door, with platform and steps, made, furnishing apartments for the engineer and his family.

Basement of north wing remodelled, and new radiators put in to correspond with that of the south wing, after the change in 1871.

Five forty-inch ventilators put upon the roof of the hospital.

Floor of the laundry folding-room relaid.

The walls of all the airing courts were erected and finished before November 1.

A large storeroom for apples fitted up in the basement of the south wing. In the original structure this room had no light, as there were no windows beneath the water table on the front of the building.

1873. Room opposite the sewing-room divided by a permanent partition, making a room for the seamstress and another for storage.

The floors of twenty of the twenty-four halls have now been relaid.

The floor of the upper rotunda was relaid.

All the distributing pipes for water were taken out and replaced by new ones, those for cold water being lined with cement.

Elevator from the folding-room to the sewing-room put in, and the laundry and the sewing-room connected by a narrow staircase.

Circular saw put in.

One hot water tank, in the rotunda basement, taken out and replaced by a new one.

All the bath-rooms, lavatories, and water closets of the north wing remodelled, with new floors and larger sinks.

.Two of Wright's bucket-plunger steam-pumps put in.

The old clay pit, southeast of the hospital, on land received, in exchange, from Samuel Day, was filled by grading down the adjoining bluffs.

The subordinate office of steward was created.

New cooking apparatus, broiler excepted, put in.

Oven in bakery rebuilt.

1874. Clarke orchard bought; 15a. 79r. Deed executed May 15th.

Iron receiving-tank put in the fourth story of the centre. The
old tank was of wood, and sixteen feet in diameter.

Digitized by

A new steam cylinder affixed to the engine, increasing its power about one-third.

A ventilating pipe from the kitchen to the large chimney put in. Letter boxes put in the halls.

An additional board sheathing put upon all the cupolas.

The lumber house, west of the barn, finished in October. Its western section to be a poultry house.

The stone viaduct for the main sewer, in the west meadow, was finished in November.

1875. New and improved elevators made, and their walls sheathed.

A large bath-room in the basement of the 3d halls, north, was made.

A room for storage made, on north side of centre attic.

Oliver Edwards lot and dwelling, adjoining the S. Day lot, and near the foot-path entrance, bought. It contained about 25 square rods. Deed executed June 2d.

Smith and Prindle lot bought, with dwelling. It adjoined the Edwards lot on the west, and contained 23r. Deed executed June 5th.

The west half of the Samuel Day homestead land bought; 5a. 664r. Deed executed June 7th. This includes the sites of the brick-yard and saw-mill.

The four old steam boilers taken out, and replaced by three larger ones.

The south storeroom in centre attic was made.

- A brick sewer, for surface water, down the hill southeast of the hospital, was made; length 486ft., including branch to north catch-basin.
- A brick sewer for surface water was made down the hill southwest of the pump house; length 118ft.
- The old water pipes from Mill River to the front portico, about 1,600ft., were taken up, and replaced by new ones.

The lean-to, adjoining the barn on the west, was erected.

- A brick sewer for surface water, and opening into Mill River, was made across the Samuel Day lot and the Samuel Day homestead land; length about 570ft., calibre 2ft.
- 1876. A brick partition wall erected, from foundation to attic, between the bath-rooms and the small dormitories of the third halls south.
 - All the woodwork, including floors and joists, of the bath-rooms, lavatories, and water-closets of the three second halls, south, was taken out, and the rooms rebuilt.

The floor of the ironing-room was relaid.

Ground graded near the entrance of the foot-path, from the county road, and a row of elm and maple trees set from the main entrance to the Samuel Day house, near the bridge.

The Samuel Day homestead bought; 5a. 99r. Deed executed June 22d.

The largest barn on the Day homestead was taken down, and set up near the barn at the hospital.

A brick sewer for surface water was made down the hill east of the east grove; length 275ft., calibre 18 inches.



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An iron fence erected from the entrance gate, along the line of the road, to the southeast corner of the S. Day homestead lot. The fountain in front of the house was set up, but not put in

operation.

- 1877. The Enos Clark pasture, adjoining the hospital farm on the west, was bought; 90a. 45r. Deed executed February 9th.
 - The walls of the engine-house were raised three feet, and a new slated roof put on. The old roof was flat and tinned.
 - The embankment around the fountain was finished, and the fountain put in operation.
 - The original brick front portico, which had tried to tumble down for several years, was taken down and replaced by one of brownstone.
 - A part of the bank of Mill River, in the west meadow, was riprapped.
 - An iron fence was erected from the entrance gate along the road to the southwest corner of the farm, at the boundary of the land of John H. Fowle.
 - The John H. Fowle lot aforesaid was bought; 10a. 21r. Deed executed December 15th.
- 1878. Picket fence built across west boundary of farm, and along the county road, from the iron fence westward.
 - Ferris lot bought; 14a., more or less. Deed executed April 4th.
 - An ice-house built at Mill River, a few feet north of the old one.
 - The stone wall of the north barnyard erected.
 - Hill and roadway graded on the south boundary of the Fowle lot, and the iron fence extended across part of the lot.
 - A concrete sidewalk laid from the entrance gate to the bridge at Mill River; and a similar walk from the entrance gate of the foot-path to the road at the top of the hill, on the front lawn.
 - A brick sewer for surface water put in on the south side of the county road, along the lower half of the hill. This sewer was extended to the top of the hill in 1879; calibre 2ft.
 - A brick sewer for surface water put in on the north side of the county road, from the main entrance nearly to the bottom of the hill: calibre 2ft.
 - The stonework of the bridge for a road into the west pasture, south of the paper mill, was built.
 - A severe freshet, on the 10th of December, carried away both ice-houses. •
- 1879. One ice-house rebuilt in January and filled.
 - Justin Thayer peat-land bought; about 42r. Deed executed April 5.
 - The E. E. Denniston peat-land bought; 2a., more or less. Deed executed June 18.
 - An iron fence erected on the south side of the county road, from the northwest corner of the Samuel Parsons lot to the foot of the hill. This required much grading of the adjoining bluff.
 - A row of elm trees set on the Parsons lot, near the iron fence.
 - A hurricane, on the 16th of July, blew down about fifty trees on the farm.

- The brick horse-barn was extended ten feet northwardly, its walls raised three feet, and a new slated roof put on. The old roof was flat and tinned.
- The W. B. Welton lot, adjoining the Parsons lot on the south, was bought; 5a. 17r. Deed executed October 6.
- The knolls at the eastern boundary of the Parsons and Welton lots were graded, and about 500 cart-loads of clay taken from them was spread upon the garden.
- A brick building, for a scullery and a storeroom for charcoal, was erected.
- About three hundred feet of the river bank, in the west meadow, was rip-rapped.
- 1880. A wire screen was put upon the balustrade of the rotunda stairs in April.
 - Norway spruce trees set between the elms, on the south side of the hill down the road.
 - The western division of the main sewer, north of the barn, rebuilt with brick.
 - The stone bridge for the road into the Enos Clark pasture was extended about twenty-two feet westwardly.
 - In the autumn, the knolls on the eastern boundary of the Parsons lot were further graded, the road along that boundary relaid by the county commissioners, and the iron fence extended along the line of the road.
 - An ice-house, near the hospital, was erected.
- 1881. A fire-pump put into the engine-room, a subterranean reservoir constructed, hydrants placed in the centre building, and all the pipes necessary for the successful working of the pump were laid.
 - Two sections of the river bank in west meadow, an aggregate of four hundred and sixty-five feet, were rip-rapped.
 - A road was laid out from the north grove to the northeast part of the farm, near the ice-house at the pond on Mill River.
 - Concrete walks were laid to the barn and the horse-barn; also between the rear building and the west outside door of the north wing.
- 1882. A new road, more remote from the hospital than the old one, was made through the grove west and north of the building.
 - A road to the west meadow made near the pump-house.
 - Road graded west of the sand-pit, adjoining the Fowle lot.
 - Ansel Wright peat-land bought; 100r., more or less. Deed executed May 24.
 - Copper lightning-rods put upon the hospital and the barns.
 - A concrete sidewalk laid from the front door across the lawn.
 - An ice-pond made in the west (E. Clark) pasture.
 - A building erected over the reservoir at the pump-house.
- 1883. Telephone put in, in February.
 - The houses and lots of Hiram Day, Ellen M. Day, and S. C. Lacore were bought. Deeds executed February 2d. These lots are at the southeast corner of the farm, near the bridge.
 - The floor of the sewing-room was relaid.

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The new road through the west and north grove was graded and finished.

- The bowling alley was taken down, and an excavation for the cellar of a large building for workshops and storage was begun, in June. The excavation was continued, and more than one-half of the cellar wall built, when the work was necessarily suspended for the season.
- One hundred feet of the eastern section of the main sewer, which was made of stone, and a part of which was under the site of the proposed building, was taken up, and replaced by a cylindrical one of brick.
- A wood-house was made by an addition to the scullery and coalhouse.
- A high wind, on the 28th of December, blew down the chimney of the pump-house.
- 1884. A new chimney, 65 feet 4 inches in height, was built at the pumphouse.

Granite gate-posts at the north barnyard set up in May.

A fire-proof building for oils, paints, etc., was built.

The Day barn was raised and extended westwardly, by an addition of 40 feet, and a cellar 120 feet long and 40 feet wide made beneath the whole. A poultry-house, connected with this barn, was also erected.

An addition of 40 feet was made to the cart-shed.

Work on the cellar for the new building, on the former site of the bowling alley, was resumed in May. The building was subsequently erected, and so far finished that the cellar and the first story were used for storage in October.

The ice-house at the pond on Mili River was taken down, and set up at the ice-pond in the west pasture.

- 1885. The Day pasture, on the Easthampton road, was bought; 23a.
 21r. Deed executed June 13.
 - A small tract of land between the Clarke orchard and the county road was bought; 14r., more or less. Deed executed September 9.
 - One of the knolls directly east of the hospital was graded down, and 1,288 feet of brick culvert and heavy stone under-drain put in, on the flat northeast of it.
 - October 4. A tempest prostrated many valuable trees in the east grove and upon other parts of the premises.
 - Under a contract for an independent pipe from the main, a new route for the hospital's supply of water, by the way of Washing ton Avenue, was selected, and the pipe laid in September and October. Water taken by the new route, Oct. 20.

ACKNOWLEDGMENTS.

A very large majority of the exercises in the chapel on the evenings of secular days, are performed by the medical officers of the hospital; but we are indebted for contributions

thereto within the past year, — to Miss Longley and Miss Shattuck for two concerts; to Miss Radcliff for a lecture on the Methods of Instruction in the Institutions for the Blind; to Dr. T. W. Meekins for stereoptic exhibitions; to Mr. J. Pickard for an evening roading; and to Mr. Burnell for two lectures.

Aside from the collection of stereoptic "slides," or pictures, belonging to Dr. Meekins, others have from time to time been purchased for the hospital, until it has accumulated more than fourteen hundred of them, illustrative of a wide range of subjects.

Acknowledgments are also due to Miss Florence Austin, for a quantity of illustrated and other newspapers, as well as for a Christmas box containing many presents for patients; to Mrs. S. S. Jocelyn, for illustrated newspapers and fancy articles for the female patients; to Miss C. E. Butterworth, for a collection of religious newspapers; to S. E. Bridgman, Esq., for newspapers; and to the publishers of the "Christian Register" and the "Staaten Zeitung," for one copy each of those papers throughout the year.

CONCLUSION.

On the 30th of September, the last day of the official year, all the officers who began the year in the hospital were still at their posts. The only change in the staff in the meantime was the addition of one to their number. In pursuance of the law requiring a female physician in each of the State Lunatic Hospitals, Dr. Emily F. Wells was appointed as Assistant Physician in December, 1884. She entered upon the duties of the office on the 1st of January, 1885, and has performed them to my entire satisfaction.

In the staff of subordinate officers at the beginning of the year there has been but one change. Miss Mary Ward, who had been entrusted with the chief charge of the sewing department for many years, has recently resigned the office, and Miss Gertrude C. Arnold has been selected as her successor, but had not assumed the duties of the position at the end of the official year.

In submitting this, the last official communication which it will become my duty as well as my pleasure to present to

your honorable board, it is natural that a retrospective glance should be thrown over the comparatively long period during which this official relationship has existed between us, for the purpose of tracing the gradual growth of the institution committed to your care. At the beginning of that period it was still comparatively in its infancy. It is very far from my intention to follow its subsequent development. A sufficient history has been given, from year to year, in the annual reports. Suffice it here to say, that, in regard to the constant unfolding of the resources of the institution, and the continual additions to the means of rendering it a comfortable and curative residence for its inmates, as well as to that application of all those resources and means which is implied by the word "management," it would appear that neither you, as the directing body, nor the administrative officers whose duties include the oversight of all the details of the organization, can reasonably complain of the very general judgment of success which has been awarded by both the government and the people.

For myself it may be said that, in this review of the past, no recurring memory, and no suggestion of reflection, has impressed me more forcibly than this,—that I have been especially fortunate in my official relations; fortunate, not alone in the persons of the officials, but in the permanence of our association or connection. Looking first to the associate officers and the subordinate officers at the heads of departments, we find that Dr. Nims, first as assistant physician and subsequently as assistant superintendent, has been with me nearly seventeen years, and Dr. Pickard more than eight years. Dr. Hall's term exceeds three years, which, though not very long, is sufficient to have determined his qualifications for a longer one. Mr. Welton has held the office of clerk and general purchaser, nineteen years. Mr. Wright, the farmer from the opening of the hospital, remained in that position more than seventeen years after my appointment, and was succeeded by Mr. Mercier, the present incumbent, who had, at that time, been employed as second to Mr. Wright more than fourteen years. Mr. Morse was elected engineer in February, 1865, and has consequently held that office more than twenty years. Mr. Shufelt, an

attendant when I came, afterwards acted as supervisor over sixteen years, resigned in 1880, and was succeeded by Mr. Gallivan, who still holds the position and had previously been an attendant more than seven years. Miss Gilbert, first employed over three years as an attendant, has now been supervisor of the department for females sixteen years. The services of Mr. Rice, as steward and director of the kitchen, not only cover the whole period of my superintendence, but extend to a several years anterior date; and Miss Ward, who recently left, had been in charge of the sewing-room over thirteen years. Upon the faithfulness to duty and to the interests of the hospital of all these officials, it is not necessary here to enlarge. Their long continuance in office is, of itself, a more than sufficient encomium.

It will readily be perceived that, with a corps of such well-trained and efficient officers, acquainted with every ramification of detail in their respective duties, and ever ready to perform those duties promptly, it is comparatively easy to arrive at the results which constitute the beauty and the excellence of a public institution. Nor is it less manifest that, in this co-operation, they do much toward lifting the burden of care, anxiety, labor and responsibility from the superintendent.

Nor, on the other hand, have I been less favored in the individual constituents and in the permanency of membership of the Board of Trustees. The board was originally constituted in 1856, two years prior to the opening of the hospital. Between that time and the time of my appointment to the superintendency, in 1864, a period of only eight years, the changes of members were so frequent that ten new men had appeared upon it, and six of them, together with four of the five original members, had disappeared from it. During the nearly threefold longer period of twenty-one years intervening between that time and this, with the exception of the appointments under the recent law increasing the number on the board, only eight new members have been elected. Two of them have left by expiration of term, one died in office, and five still remain. There was one period of nine years, from 1866 to 1875, during which the board remained a unit, without a single change.

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This continuity of membership, and the consequent stability of the governing board, and the mutual confidence and harmony of action which have ever existed between it and the superintendent, must be regarded as important factors in the production of whatever favorable results may have been achieved in the management of the hospital.

In severing the official relation which has so long and, upon my part, so happily existed between us, I carry with me the abiding sentiment of sincere respect and regard for every member of the board during my connection with the institution; and among the most prominent of all my agreeable memories, will be the fact that no unpleasant word has ever passed, either way, between me and any one of them.

PLINY EARLE.

OCTOBER 8, 1885.

APPENDIX.

2.* Monthly Admissions, Discharges and Averages.

MONTHS.	AI	MISSI	ONS.		SCHAR ding d	OKS leaths).		VERAGE O	PATIENTS
201110,	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
1884.									
October,	4	6	10	6	8	14	229.9	233.16	463.06
November,	4	7	11	3	8 3	6	227.13	233.9	461.03
December,	3	8	11	6	2	8	224.42		
1883.							,		
January,	10	3	13	-	2	2	229.84	242.32	472.16
February,	2	3	5	2 6	2	4	235.	243.53	
March,	9	6	15	6	5	11	236.68	243.55	480.23
April,	7	8	15	4	4	8	239.73	246.53	486.26
May,	7	9	16	11	13	24	237.87	245.51	483.38
June,	5	4	9	5	5	10	235.7	243.1	478.8
July,	5	8	13	9	5	14	236.13	246.26	482.39
August,	4	5	9	3 5	5	8	231.55	248 06	482.61
September,	6	3	9	5	9	14	235	245.2	480.2
Total of cases, .	66	70	136	60	63	123			
of persons,	63	67	130	59	62	121	-	-	_
Daily average for						"			
the year,.	_	_	_	_	_	_	233.47	242.47	†‡ 475.94

^{*} For Table No. 1, see the beginning of the Superintendent's report.

3. Received on First and Subsequent Admissions.

					CAS	ES ADMIT	FED.		es Previo	
NUMBER OF	ТН	E ADMI	8810	ж.	Males.	Females.	Totals.	Males.	Females	Totals.
First, .					52	45	97	_	-	_
Second,.					8	15	23	1	4	5
Third, .					3	4	7	-	2	
Fourth, .					1	1 1	2	3	3	2 6
Fifth, .					_	2	2	-	3	3
Twelfth,					1	_	1	4	-	4
Fifteenth,*					_	1	1	_	-	_
Sixteenth,*		•		•	-	1	1	-	11	11
Total of	· ca	90			65	69	134	8	23	31
		rso ns ,	:		62	66	128	3	9	12

^{*} The fifteenth and sixteenth admissions were of the same person. Hence her previous recoveries are inserted only after the last admission.

[†] These totals were obtained by a division of the sums of daily residence for the year by 365, the number of days in the year.

[†] One man and one woman admitted, and one man and two women discharged, as not instanc, are not included in the following tables.

4. Ages of Persons Admitted for the First Time.

		AT F	IHSANITY.	ľ	WR	EN ADNIT	FED.
A G E S.		Males.	Females.	Totals.	Males.	Females.	Totals.
Congenital,	•	2	_	2	_	_	_
Fifteen years and less, .		1	2	3	2	-	2 7
From 15 to 20 years, .		4	4	8	2	5	7
20 to 25 years, .		8	4	12	10	4	14
25 to 30 years, .		13	9	22	14	6	20
30 to 35 years,		2	8	10	5	8	13
35 to 40 years, .		6	2	8	4	6	10
40 to 50 years, .		4	6	10	4	6	10
50 to 60 years, .		5	8	8	7	5	12
60 to 70 years, .		2	1	3	2	3	. 5
70 to 80 years, .		-	_	_	1	_	1
Over 80 years, .		-	i -	- 1	-	2	2
Unknown,		5	6	11	1	-	1
Total of persons, .		52	45	97	52	45	97

5. Parentage of Persons Admitted.

				MA	LES.	FEM	ALES.	Тот	ALS.
PLACES OF N	ATI	VITY.		Father.	Mother.	Father.	Mother.	Father.	Mother.
Maine, .				-	-	1	1	1	1
New Hampshire	,	•	•	2	1	-	_	2	1
Vermont, .				-	1	1	2	1	3
Massachusetts,				18	17	17	17	35	34
Rhode Island,				1	-	-	1	1	1
Connecticut,				2	2	1	2	3	4
New York, .				-	1	1	2	1	3
Pennsylvania,				-	-	1	1	1	1
Virginia, .				_	-	1	_	1	l –
Canada, .				5	5	2	2	7	7
England, .				4	4	ī	3	5	7
Ireland, .		-		22	22	32	28	54	50
Scotland, .		•	Ċ		- ī l	ī	i	i	2
France, .	•	•	Ċ	1	l i'	_		i	ī
Germany, .	•	•	•	l î	i	1	1	2	2
Hungary,	•	•	:	:	'	i		ī	_
Bohemia, .	•	•	•	1	1	1 1	1	i	2
Switzerland.	•	•	•	l i	, î i			1	1
Sweden, .	•	•	•	l <u>.</u>		1	1	1	;
Unknown, .	:	•	•	4	4	4	8	8	7
Total of per	3 0n	, 8, .		62	62	66	66	128	128

<i>6</i> .	Residence	of	Persons	Admitted.
------------	-----------	----	---------	-----------

PLA	CES.				Males.	Females.	Totals.
Hampshire County,		•			15	16	31
Hampden County,					24	28	52
Berkshire County,				.	12	14	26
Franklin County, .					10	7	17
Worcester County,		•			-	1	1
Suffolk County, .					1	-	1
Total of persons,					62	66	128
Cities or large towns,	٠				27	27	54
Country districts, .					35	89	74
Total of persons,					62	66	128

^{*} Containing not less than 10,000 inhabitants.

7. Civil Condition of Persons Admitted.

NUMBER	NUMBER OF THE		Unnarried.			A	Married.			WIDOWED.			DIVORCED.		
ADMIS	SION	τ.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	
First,		•	31	23	54	19	17	36	2	4	6	-	1	1	
Second,			5	4	9	1	2	8	-	7	7	-	-	-	
Third,			1	2	3	1	2	3	-	_	_	-	-	-	
Fourth,			-	1	1	1	_	1	-	_	_	-	-	-	
Fifth,		•	-	_	-	-	1	1	-	1	1	_	-	. -	
Twelfth,	•		1	-	1	_	-	-	-	_	_	-	_	-	
Sixteenth	1,	•	_	1	1	_	-	-	_	_	-	_	-	-	
Total sons,		er-	38	31	69	22	22	44	2	12	14	-	1	1	

Occupations of Persons Admitted. 8.

OCCUPATIONS.		Males.	. OCCUPATIONS.	Females
Student,		4	Teacher,	1
Commercial traveller,		1	Copyist,	1
Telegraph operator, .		1	Housekeeper,	5
Druggist and chemist,		1	Seamstress,	1
Watchmaker,		1	Merchant's wife,	1
Paper maker,		2	Farmer's wife,	1
Farmer,		8	Machinist's wife,	1
Wallet maker,		1	Mechanic's wife,	1
Cigar maker,		2	Engineer's wife,	1
Mechanic,		2	Moulder's wife,	1
Machinist,		2	Stonecutter's wife,	1
Armorer,		1	Slater's wife,	1
Carpenter,	.	3	Carpenter's wife,	2
Livery-stable keeper, .		1	Shoemaker's wife,	1
Steel polisher,		1	Railroad employee's wife,	1
Metal worker,		1	Laborer's wife,	8
Section foreman on railroad	1,	1	Tailor's wife,	1
Baker,	.	1	Armorer's daughter,	1
Mill operative,		6	Carpenter's daughter, .	1
Laborer,		15	Paper maker,	3
Peddlor,		1	Box maker,	1
None,	.	6	Mill operative,	8
Total of persons,.	.	62	Peddler,	1
		ļ	Servant,	10
			Unknown,	1
	1		None,	11
	1		Total of persons, .	66

9. Reported Duration of Insanity before Last Admission.

DREWIANG DWD ARIAN		Admiss Hosp		ALL C	THER A		Totals.			
PREVIOUS DURATION.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	
Congenital,	2	_	2	-	_	_	`2	_	2	
Under 1 month,	4	6	10	-	_	'	4	6	10	
From 1 to 3 months,	10	4	14	_	_	1	10	4	14	
3 to 6 months,	7	7	14	-	_	-	7	7	14	
6 to 12 months,	11	4	15	-	1	1	11.	5	16	
1 to 2 years, .	3	5	8	-	-	l – ,	3	5	8	
2 to 5 years, .	6	6	12	3	8	11	9	14	23	
5 to 10 years, .	4	2	6	1	7	8	5	9	14	
10 to 20 years, .	1	3	4	3	3 3	6	4	6	10	
Over 20 years,	_	2	2	3	3	6	3	5	8	
Unknown,	4	6	10	3	2	5	7	8	15	
Total of cases	52	45	97	13	24	37	65	69	134	
of persons, .	52	45	97	12	22	34	62	66	128	
Average of known							l			
cases,	148	42	3.3	1320	1088	111	322	$6\frac{2}{3}$	4 3 3	

^{*} In this division of the table the whole period of time, from the first attack to the last admission, is indicated. Two patients are included who are in the first division, they having been admitted for the first and the second time within the year. Three other patients are repeated, as they were received twice each, on admissions subsequent to the first. As the united duration of their disease was f(ty)-three years, the repetition, or duplication of it, although called for by the circumstances, unjustly swells the average duration, and consequently, in my opinion, very materially impairs the value of the table. The congenitals are not included. — P. E.

10. Form of Disease in the Cases Admitted.

FORM OF	Males.	Females.	Totals.				
Mania,	•				38	50	88
epileptic, .					2	2	4
					2	1	3
Melancholia.				. 1	8	11	19
Dementia,				.	10	4	14
epileptic,					2	1	3
paretic,				.	1	_	1
senile, .			•	.	1	_	1
Congenital idiocy,.	•	•	•	.	1	-	1
Total of cases,				.	65	69	134
of persons,	•			.	62	66	128
			_	_		D:===:	GO

11. Probable Causes of Insanity in Persons Admitted.

•	CA	uses.				•	Males.	Females.	Totals.
	Phy	sical	·					_	10
Ill-health, .	•	•	•	•	•	•	3	7	10
Epilepsy, .	•	•	•	•	•	•	3	8	6
Intemperance,		•	•	•	•		5	-	5
Overwork, .		•	•	•			8	1	4
Hereditary, .	•	•	•		•		2	2	4
Masturbation,				•			3	-	3
Injury of head,			•				2	1	3
Sunstroke, .							2	-	2
Puerperal, .				•			-	2	2
Change of life,		•					-	1	1
Overwork and tr	oubl	е, .					1	_	1
Overwork and us	e of	nare	otics,				1	_	1
Mountain fever,							1	_	1
Malaria, .							1	-	1
Syphilis, .							1	-	1
Paresis,							_	1	1
Spinal disease,							-	1	1
Total of phy	sical	۱, .					28	19-	47
	Me	ntal.					•		,
Business trouble,		•	•	•	•	•	1	_	1
Domestic trouble	·, .	•	•	•	•	•	1	1	2
Religious exciter	nent	, .	•	•	•	•	-	8	3
Fright,	•	•	•	•	•		_	1	1
Total of me			•	•	•		2	5	7
Total of phy	sical	l, .	•	•	•	•	28	19	47
Unknown, .	•		•	•			32	42	74
Total of per	sons.					.	62	66 ,	128

12. Relation to Hospitals of Persons Admitted.

HOSPITAL RELATIONS.	Males.	Females.	Totals
Never before in any hospital,	49	41	90
Former inmates of this hospital,	8	21	29
Former inmates of other hospitals in this State,	1	2	3
Former inmates of this hospital and of other hospitals in this State,	-	1	1
Former inmates of hospitals in other States,	-	-	_
Former inmates of this hospital and of hospitals in other States,	4	-	4
Former inmates of other hospitals in this State and of hospitals in other States,	-	1	1
Total of persons,	62	66	128

13. Discharges Classified by Admission and Result.

	Totale.	64	16	20	-	-	-	-	1	120	118
TOTALS.	Females.	47	6		-	-			-	61	09
•	Males.	47	2	4	ı	1	1		'	2	89
	Totals.	52	8	ı	1	ı	ı	ı	1	27	ı
DIRD.	Females.	10	-	ı	ı	ı	ı	ı	ı]=	1
	Males.	15	-	ı	1	ı	1	1	ı	9	ı
ë	'l'otals.	16	2	03	1	-	-	1	ı	25	1
Unimproved.	Females.	10	ဆ	-	ı	-	-	ı	1	91	ı
CMD	Males.	9	87	-	ı	•	1	1	ı	6	ı
ċ	Totals.	23	•	_	,	1	ı	-	1	စ္တ	ı
IMPROVED.	Females.	13	4	ı	ı	1	1	1	ı	12	ı
Ä	Males.	10	-	-	1	i	ı		1	13	1
VED.	Totals.	40	_	-	-	1	1	1	1	G	1
Much IMPROVED.	Females.	န	ı	1	-	•	.'	1	-	9	1
Мгсн	Males.	2	-	-	ı	ı	1	1		7	1
ė	Totala.	25	တ	-	1	1	ı	1	=-	Si	1
RECOVERED.	Females.	11	-	1	ı	ı	1	1	1	23	1
REC	Males.	14	61	-	1	1	1	1	'	17	1
		•	•		•	•	•	•	•	•	•
			•	•	•	•		•		•	•
		٠	•	•	•	•		•	•	•	•
	SION.		٠	•	•			•	•		ons,
	ADMISSION.	•	•	•	•	•		•	•	cascs	of persons,
	1			•		•	•	•	•	Jol	Jo
		First, .	Second,	Third,	Fourth,	Fisch, .	Eighth,	Twelfth,	Fifteenth,	Total of cases,	gle

<i>14</i> .	How	Supported.
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	PAT	ENTS ADM	ITTED.	WREKLY A	VERAGE OF	THE YEAR.
SUPPORTED AS—	Males	Females.	Totals.	Males.	Females.	Totals.
State patients, .	. 21	22	43	82.29	72.15	154.44
Town patients, .	. 36	38	74	118.48	143.10	261.58
Private patients,	. 9	10	19	32.62	27.20	59.82
Total of cases,	. 66	70	136	233.39	242.45	475.84

^{*} This weekly average is one-tenth of one less than the daily average, 475.94.

15. Cases Discharged Recovered - Duration.

PERIOD		TION BI			OSPITA ESIDENC			LE DUR.	
PERIOD.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.	Ma.	Fe.	Tot.
Under 1 month,	3	2	5	-	-	_	-	_	
From 1 to 3 months, .	5	3	· 8	10	3	13	2	-	2
3 to 6 months, .	1	4	5	3	3	6	4	3	7
6 to 12 months,	6	-	6	2	3	5	2	1	3
1 to 2 years, .	-	2	2	2	2	4	6	4	10
2 to 5 years, .	1	-	1	-	-	-	1	2	3
5 to 10 years, .	-	-	-	-	-	-	1	-	1
10 to 20 years, .	-	-	-	-	1	1	-	1	1
Over 20 years,	-	-	-	-	-	-	-	-	_
Unknown,	1	1	2	-	-	-	1	1	2
Total of cases,	17	12	29	17	12	29	17	12	29
Total of persons, .	17	12	29	17	12	29	17	12	29
Average of known cases (in months), .	81/2	5%	712	5 ₁ ¹ ₇	10 ₁₂	11 ₂ 8	138	27,7,	1925

16. Cases Resulting in Death - Duration.

		DURATIO	DURATION BEPORE ADMISSION.	MIBBION.	Host	Hospital Residence.	NOR.	W ног	Whole Duration from the Attace.	ROM THE
PERIOD.		Males.	Females.	Totals.	Males.	Females.	Totals.	Malos.	Females.	Totals.
Congenital, Under I month, From 1 to 3 months, 3 to 6 months, 1 to 2 years, 2 to 5 years, 5 to 10 years, 10 to 20 years, Unknown,		- I	11000100010		1 20 20 20 1 1 1 1 1 1 1	1-111-01-00		H H H C C C C C C C	114111400441	- 1 1 0 0 0 0 0
Totals,	•	16	=	27	16	11	27	16	=	27
Average of known cases (in months),	•	8418	92	8048	112 %	146 ₁ 5	12618	185,48	20377	202

<i>17.</i> (Cases	Discharged	bu	Recovery	or	Death.
--------------	-------	------------	----	----------	----	--------

FORM OF IN	9 4 32	TV		3	ECOVARIE.	s .		DEATHS.	
TORM OF IN	CORN OF INDAMILI.				Females.	Totals.	Males.	Females.	Totals
Mania,				14	9	23	9	5	14
epileptic,				-	-	-	2	-	2
Melancholia,		•		8	3	6	-	1	1
Dementia, .				-	-	-	5	5	10
Totals, .				17	12	29	16	11	27

18. Causes of Death.

CAUSES.			Males.	Females.	Totals.
Nervous system,— Apoplexy, Organic disease of the brain,	:		2 2	- 2	2 4
Respiratory,— Phthisis,		•	4 5	2 1	6 6
Digestive, — Disease of the liver,			-	1	1
Zymotic, — Typho-malarial fever, Erysipelas,			1 ,	- 1	1 1
Developmental, — Senile debility, Ascites from debility, Syphilis,			- - 1	2 1 -	2 1 1
Accidental, — Suicide, · Railroad accident,			. 1	1 -	1 1
Totals,		.	16	11	27

19. Deaths, Classified by Results of Previous Admissions.

			RECOVERED	<u>.</u>	Muc	MUCH IMPROVE	<u> </u>	A	IMPROVED.		Ü	Unimproved			Totals.	
NUMBER OF THE ADMISSION.	2 ADMIS-	Males.	Females.	.alatoT	Males.	Females.	Totale.	Males.	Fermales.	.efstoT	Males.	Females.	.siatoT	Males.	Females.	.statoT
Second,	•		_	-	1	ı	ı	ı	1	1	-	ı	-	F	-	87
Totals, .	•	<u> </u>	1	-	'	1	1	'	'	'	-	ı	-	-	-	7

20. Recoveries Classified by Results of Previous Admissions.

		RECOVERED.	6	MU	MUCH IMPROVED.	ED.	q	IMPROVED.		Ď	UNIMPROVED.		F	Totals.	
NUMBER OF THE ADMISSION.	Malos.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	.solah[Females.	.afaioT
of Paragraphic strategy of the		-1	1 2		1 1	I	1 1	1 1	1 1	1 1	1 1	1 1	1 2	1	3
Totals,	2	1	8		'	1	'	'	'	'	'	'	8	-	4
* In all cases of more	han one	admission	more than one admission, the classification is based upon the result of the admission next proceding the last, in each case respectively.	fication t	n pesuq s	oon the r	salt of th	e admiss	lon negt	proceding	the last,	to each	onse respe	ctively.	

21. Deaths Classified by Duration of Insanity and of Treatment.

	FIRST AT	TACK.")	Hospi	TAL RESID	ERIOD OF
Males.	Females.	Totals.	Males.	Females.	Totals.
1		1	1	_	1
-	-	-	1	1 1	2
_	1 1	1	1		1
1		1	-	_	_
_	_		_	_	_
1		1	Q	1	
1	_	•	1 1		1
1	_	1 1	1		1
2	2	4	1	Z	5
	1	4		4	8 5
		9	2	8	5
3	2	5	-	-	-
16	11	27	16	11	27
195 1 1	2674	2264	112	160-3	132^{7}_{18}
	1 - 1 - 1 1 2 3 4 3	1	1 - 1 - 1 1 1 - 1 1 - 1 1 - 1 2 2 4 3 1 4 4 5 9 3 2 5	1 - 1 1 - 1 1 1 1 - 1 1 1 1 - 1 3 1 - 1 3 1 - 1 3 1 2 2 4 3 3 1 4 4 4 4 5 9 2 3 2 5 -	1 - 1 1 - 1 1 - 1 1 1 1 1 1 1 1 1 1 1 1

22. Ages of those who Died.

AGES.		AT '	TIME OF F ATTACK.	IRST	AT T	ime of Di	BATH.
AUES.		Males.	Females.	Totals.	Males.	Females.	Totals
Fifteen years and less,.		2	_	2	_	_	_
From 15 to 20 years, .		_	2 2	2	· -	_	_
20 to 25 years, .	. 1	3 2	2	2 5	i -	_	-
25 to 30 years, .		2	- 1	2	1	- 1	1
30 to 35 years, .	.	1 2	- 1	1	8	1	4
35 to 40 years, .	.	2	1	8	2	-	4 2 3 4 5
40 to 50 years, .	.	1	-	1	2 2 2 2 2	1	3
50 to 60 years, .	.	1	8 1	4 2	2	2 3	4
60 to 70 years, .	.	1	1 1	2	2	3	5
70 to 80 years, .	. 1	-		_	2	3	5
Over 80 years,		_	-	_	-	1	5 1 2
Unknown,	\cdot	3	2	5	2	l –	2
Totals,		16	11	27	16	11	27

Annual Admissions since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1885. 23.

																					K	l
											NEW CASES (FIRST ADMISSION).	ASES (FIRST A	DM18810	ж).							
												Die	Discharged and Died in 1884-85.	AND]	KI GXIC	1884	85.					
		YEARS.	ni.			ADMILIAN.		REC	RECOVERED.	<u></u>	MUCH	MUCH IMPROVED.		DICE	IMPROVED.		UNIX	UNIMPROVED.			DIED.	ا ہ
				1	Males.	Females.	.siatoT	Males.	Females.	:slatoT	Males.	Females.	.elatoT	Males.	Females.	Totals.	Males.	Females.	.eladoT	Males.	Females.	Totale.
	1858, 2 months,	onths,			66		228	ı	ı	1	1	•	١	•	,	1	ı	1	1	67	63	4
	1858-59.				. 42	_	38	ı	i	ı	1	ı	ı	ı	1	1	1	•	,	ı	1	1
	1859-60,	•			99	91	167	1	1	1	1	ı	,	1	,	-	1	ı	•	ı	_	-
	1860-61,				. 58		101	ı	1	<u> </u>	ţ	ı	1	ı	,	-	ı	1	ı	ı	,	ŧ
	1861-62.				. 51		†6	ı	1	1	•	1	ı	1	,	,	ı	•	1	1	1	1
	1862-63,				- -		118	ī	,	ı	1	1	1	ı	,	-	1	1	ı	1	1	1
	1863-64.					_	69	1	1	1	1	ı	1	ı	1	_	ı	1	1	1	ı	ſ
Dia	1864-65,				. 54		109	1	1	1	1	ı	ı	ı	1	1	ı	1	1	ı	1	ŧ
itize	1865-66,				99		118	ı	1	-	1	ı	1	ı	1	1	1	ı	1	-	1	-
ed l	1866-67.				42		111	ı	1	,	ı	ı	1	ī	_	_	1	1	1	ī	1	ł
_{oy} (1867-68.				- 2		125	1	ı	1	ı	,	,	ı	•	-	-	ı	_	ī	1	1
G	1868-69.				. 72		136	ī	1	1	ı	,	1	,	1	,	1	ı	ı	1	1	1
0	1869-70,				æ 		183	1	1	1	1	ı	1	ı	ī	ı	•	1	-	1	-	-
0	1870-71.	•			- 68 		181	1	ı	t	1	1	1	1	ı	-	1	ı	1	CZ	1	01
Q	1871-72,				<u>88</u>		168	ı	~	-	1	1	1	ı	ł	1	1	•	ı	ı	1	1
le	1872-73,		•	-	8 8		158	1	1		1	•	=	1	•	=	-	1	=	•	_	_

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1873-74,	1874-75,	1875-76,	1876-77,	1877-78,	1878-79,	1879-80,	1880-81,	1881-82,	1882-83,	1883-84,	1884-85,	Totals,

Annual Admissions Since the Opening of the Hospital, with the Discharges and Deaths within the Official Year, and the Number of each Year's Admissions remaining Sept. 30, 1885. — Concluded.

23.

							REA	\DMIT	READMITTED CASES.	ASES.				:			-			
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1875-76, 1876-77, 1877-78, 1878-79, 1879-80, 1880-81, 1881-82, 1882-83, 1882-83,	Totals,

25. Classed Average of Patients.

OFFIC	AL	YEAR.		State Patients.	Town Patients.	Private Patients.	Totals.
Monthl	y A	verag	e.				
1864-65,	٠.			225.10	48.16	69.83	343.2
1865–66,	•	•	•	252.16	50.58	75.58	378.3
Weekly	A	erage	·				
1866-67,				261.96	49.46	89.75	401.1
1867-68.				262.65	47.92	103.06	413.6
1868-69,				248.52	54.98	101.46	404.9
1869-70,				236.19	65.04	107.23	408.4
1870-71,				234.10	77.07	118.38	429.5
1871-72,				226.96	89.57	112.27	428.8
1872-73,				248.02	99.23	90.00	437.2
				284.48	102.88	82.06	469.4
1874-75				274.35	128.34	72.46	475.1
1875-76,				259.19	146.02	68.94	474.1
1876-77.				254.84	161.58	60.02	476.4
1877-78,				211.90	175.71	54.75	442.3
1878–79,				200.34	182.29	54 23	436.8
1879-80,				197.03	198.01	55.46	450.5
1880-81,				180.82	214.15	57.19	452.1
1881-82.				166.84	238.25	56.52	461.6
1882-83.				161.62	247.63	57.58	466.8
1883-84				155.10	251.23	56.06	462.3
1884-85.				154.44	261.58	59.82	475.8

26. Monthly Consumption of Gas.

	 МО	NTHS.	_	 	Ĺ	Cubic feet.	Daily Average
	1	884.	•				i
October, .					. '	42,700	1,377.42
November,					i	49,200	1,640.
December,					. [49,650	1,601.61
	1	885.			•		1
January,						47,700	1,538.71
February,						38,450	1,373.21
March, .					. 1	37,200	1,200.
April, .					.	26,800	893.33
Mav,					.	17,950	579.03
June, .					.	13,950	465.
July, .					. 1	13,200	426.12
August, .					. i	19,650	633.87
September,	•				.	28,200	740.
Total,			_			384,650	1,054.11

^{*} Daily average for the year.

27. Supplies for the Several Departments for the Year 1884-85.

Lanterns.			6
Forks.		1111111101101111	13
Knives.		111111118411811	8
Syrap Caps.	-11611111		4
Pitchers.		010411011-440	3
Bowls.	11211121	10 1 8 1 1 1 1 2 1	28
Muga.		91:1:1:3:1:1:1:1:1	8
Tumblers.	428 123 1 128 1	212 121 121 12 12 12 12 12 12 12 12 12 1	702
Зацоета.	22 58 18 8 18 8 18 8 18 9 19 19 19 19 19 19 19 19 19 19 19 19 1	30 - 12 - 24 - 28 - 28 - 28 - 28 - 28 - 28 - 2	862
.equ')	25 - 26 - 24 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -	147 18 19 1 1 1 1 1 1 1 1	5 22T
Plates.			35
Carpet Strips.	120011100	i i	35
Combs.		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	061
Hair Brushes.	- 1311-1-3	The Distriction	G .
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J'owels.	305481.48	1222884 188222881	355
Pilow-ticks.	111101101		5
Bed-ticks.	1100144416031	m 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1	3
Kubber Sheets.	103101101	100111001001111	55
Blankets.	E 1 8 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	180874331311111	921
Bed-spreads.	415011199		76 I
Pillow-cases.	288822722	88 12 18 3 1 1 2 1 3 3 8 4 1 1 9 9 1 1 2 1 3 3 8 1 1 1 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1	#
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Wen's Department. Ciper 1st Hall, 2d H	Zapkins.	8111111	2111111112118
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Wen's Department. Upper 1st Hall, 2d Hall, 3d and 4th Halls, 3d and 4th Halls, 2d Hall, 2d Hall, 2d Hall, 2d Hall, 3d and 4th Halls, 4th Halls, 3d Hall, 3d Hall, 3d Hall, 4th Hall, 1cower 1st Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 4th Hall, 5d Hall, 4th Hall, 4th Hall, 5d Hall, 4th Hall, 6d Hal	.erstan') sanit)	111-21111	111014111-10111 0
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28. Days' Work by Patients.

		FARM.		Кітснви.		Sewing- Room.	LAUNDRY.			
MONTHS.	-	Men.	Men.	Women.	Totals.	Women.	Men.	Women.	Totals.	
1884.			-							
October, .		862	124	248	372	169	54	402	456	
November, .	.	677	150	245	395	188	49	340	389	
December, .		614	155	218	373	184	40	404	444	
1888. January, .		510	155	230	385	176	30	388	418	
February,	.	50 6	140	203	343	174	24	349	378	
March, .	.	525	155	211	366	193	25	365	390	
April,		593	150	221	371	149	41	359	400	
Мау,		710	155	244	399	163	52	322	374	
June, .	.	872	150	237	387	153	52	360	412	
July,		868	155	244	399	262	54	394	448	
August,	.	754	155	243	398	233	52	332	384	
September,	.	858	150	221	371	236	52	352	404	
Totals,	. ;	8,349	1,794	2,765	4,559	2,280	525	4,367	4,892	

The patients whose work is recorded in this table, were employed as many hours in the day as were the employees in each of the several departments, respectively. The total number of days' work is 20,080, to which may be added 775 days, by men, in the mattress room, making an aggregate of 20,855 days. The number is larger than in any former year, with two exceptions.

No record was kept of the time of work on the ornamental grounds, at the stable, in the bakery, the boiler room, and the carpenter's shop. A large amount of other work is done, both in the halls, and, at irregular times, out of them.

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29. List of Articles made in the Sewing-Room.

Dresses, .				208	Mattress-ticks,	43
Waists, .				18	Pillow-ticks,	64
Chemises, .				257	Bed-spreads hemmed,	75
Drawers, .			٠.	104	Curtains,	69
Skirts, .				107	Handkerchiefs hemmed,	65
Sacques, .				. 8	Napkins hemmed, .	5 0
Night-dresse	38,			15	Table-cloths,	22
Shirts, .			•	341	Dish-towels,	343
Suspenders,	pa	rs,		164	Dish-towels hemmed,	47
Collars, .				123	Roller-towels,	157
Aprons, .				225	Carpets made,	2
Camisoles, .				11	Carpet-strips hemmed,	61
Sheets, .				419	Clothes bags	81
Pillow-cases	,			580	Pants,	2
Bolster-case	8,			24	Articles repaired, .	24,235

30. Upholstery done in the Year.

		-		
Hair mattresses made, new materials, .				23
Hair mattresses made, new ticks,				35
Hair mattresses overhauled, hair repicked,				116
New husk underbeds made, new materials,				23
Old underbed ticks filled with new husks,			•	127
Hair pillows made, new materials,			•	15
Old pillow-ticks filled with new hair, .			•	20
Hair pillows overhauled, hair repicked, .	•			47

31. Annual Cost of Gas.

	YI	SAR.		ļ	Cost of Gas.	Average Number of Patients.	Cost per Patient.
1860–61, .					\$2,030 39	314.26	\$6 46
1861–62, .					2,085 29	313.80	6 64
1862-63, .			•		2,109 02	355.63	5 98
1863-64, .					2,069 79	357.63	5 78
1864–65, .					1,653 05	342.40	4 82
1865-66, .				. 1	1,107 98	376.35	2 94
1866–67, .					1,056 16	401.03	2 6
1867–68, .					1,022 51	418.41	2 47
1868 -6 9, .				. ,	903 92	405.10	2 2
1869–70, .					915 30	408.83	2 2
1870-71, .					1,043 99	421.90	2 4
1871-72, .					980 94	428.72	2 2
1872–73, .					1,006 61	437.23	2 30
1873-74, .					1,066 74	469.54	2 2
1874-75, .				•	1,012 63	475.35	2 1
1875–76, .					1,089 82	474.21	2 2
1876-77, .					1,033 59	476.16	2 1
1877–78, .					1,066 02	442.43	2 4
1878–79, .					1,033 05	436.73	2 3
1879–80, .					945 00	450.51	2 10
1880-81, .					949 65	451.79	2 1
1881–82, .					919 13	461.66	2 0
1882-83, .					992 10	466.76	2 10
1 883– 84, .					1,031 55	463.05	2 2
1884-85, .					951 49	475.94	1 99

The hospital has always been supplied with gas by the Northampton Gas Light Company. Until April 1, 1879, the price was \$3.25 per thousand cubic feet, with an additional charge for meter-rent. From that date to July 1, 1884, it was \$3, including meter-rent, with a discount of five per cent during the last four years of the period; and since the date last mentioned it has been \$2.50, without discount.

32. Trustees of the Northampton Lunatic Hospital.

NAMES.	Residence.	When app'ted.	Service ended.	From what cause.
Charles E. Forbes,* .	Northampton, .	1856	1857	Term expired
Lucien C. Boynton, .	Uxbridge,	1856	1858	u ū
Eliphalet Trask, .	Springfield,	1856	1875	
John C. Russell,*	Great Barrington,	1856	1859	Resigned.
Horace Lyman,	Greenfield,	1856	1857	Removed.
Charles Smith,	Northampton, .	1857	1860	Resigned.
Luther V. Bell,* .	Somerville,	1857	1859	
Zebina L. Raymond,*	Greenfield,	1858	1859	**
Franklin Ripley,* .	Greenfield,	1859	1860	Died in office
Edward Dickinson *	Amherst,	1859	1864	Resigned.
Walter Laflin,* .	Pittsfield,	1859	1866	Term expired
Silas M. Smith, .	Northampton, .	1860	1863	
Charles Allen,	Greenfield,	1860	1861	Resigned.
Alfred R. Field,* .	Greenfield,	1861	1864	ű.
Edward Hitchcock,	Amherst,	1863	1879	"
Silas M. Smith, .	Northampton, .	1864	_	Still in office.
Edmund H. Sawyer,*	Easthampton, .	1864	1879	Died in office
Henry L. Sabin,*	Williamstown, .	1866	1876	Term expired
Adams C. Deane	Greenfield,	1875	_	Still in office.
Henry W. Taft, .	Pittsfield,	1876	_	66 46
William M. Gaylord,	Northampton, .	1879	1883	Term expired
Lyman D. James, .	Williamsburg, .	1879	_	Still in office.
Christop'r C. Merritt,	Springfield,	1883	_	66 66
Sarah A. Woodworth,	Chicopee,	1884	_	
Sarah M. Butler, .	Northampton, .	1884	-	" "

^{*} Deceased.

33. Superintendents and Treasurers.

SUPERINTENDENTS.

William H. Prince, M. D., from Oct. 1, 1857, to April 1, 1864. Pliny Earle, A. M., M. D., from July 2, 1864, to Oct. 1, 1885. Edward B. Nims, M D., from Oct. 1, 1885.

TREASURERS.

Eliphalet Trask, from July 4, 1856, to Aug. 14, 1860. William H. Prince, from Aug. 14, 1860, to Feb. 26, 1864. Silas M. Smith, from March 3, 1864, to Oct. 2, 1868. Pliny Earle, from Oct. 2, 1868, to Oct. 1, 1885. Edward B. Nims, from Oct. 1, 1885.

34. Officers and Employees. Time employed, March 1, 1885.

NAMES.	Years.	Months.	Days
Pliny Earle, M. D., Superintendent,	20	7	26
Edward B. Nims, M. D., Assistant Superintendent,	16	2	14
Daniel Pickard, M. D., 1st Assistant Physician, .	7	10	22
David G. Hall, M. D., 2d Assistant Physician,	2	8	13
Emily F. Wells, M. D., 3d Assistant Physician, .	-	2	_
Walter B. Welton, Clerk,	19	:	14
John Mercier, Farmer,	17	8	_
Danford Morse, Engineer,	20		7
Robert H. Gallivan, Supervisor,	11	10	11
Lucy A. Gilbert, Supervisor,	18	_	18
F. Josephus Rice, Steward,	26	4	24
Mary Ward, Seamstress,	14	6	3
George B. Walker, Baker,		. 8	20
Frances C Earle, Assistant Clerk,	12	11	6
Minnie J. Guilfoil, Assistant Supervisor,	6	5	24
Gertrude C. Arnold, Assistant Scamstress,	ĭ	5	
Ida D. Hyde, Laundress,		. 9	4
Julia A. Pratt, Assistant Laundress,		11	15
Henry W. Estey, Attendant,	2	11	ő
	$\frac{1}{2}$	11	3
William J. Douglass, Attendant,	2	8	23
John L. Howard, Attendant,	ī	. 4	29 29
	1	11	29
John S. Powers, Attendant,	_		-
Robert Carter, Attendant,		10	24
Joshua F. King, Attendant,	-	7	23
Thomas P. Clair, Attendant,	_	5	8
Arthur Day, Attendant,	-	4	17
Herbert E. Phinney, Attendant,	-	4	2
John Curtis, Attendant,	-	4	2
Michael J. Flynn, Attendant,	-	1	29
James M. Shipperly, Attendant,	17	1	3
Maria E. Graves, Attendant,	17	1	7
Jane McGuire, Attendant,	9	10	3
Cécile Riel, Attendant,	8	4	23
Frances F. Poor, Attendant,	6	4	13
Naomi A. Griffin, Attendant,	4	9	21
Barbara McDonald, Attendant,	3	7	9
Flora R. Brown, Attendant,	2	2	25
Mary Hall, Attendant,	1	9	10
Jeanette McLean, Attendant,	1	6	3
Minnie Laventure, Attendant,	1	3	9
Annie Preble, Attendant,	1	2	11
Nellie D. Parker, Attendant,	-	11	18
Nettie V. Dinsmore, Attendant,	-	9	11
Olive A. Webber, Attendant,	-	9	9
Lavinia Trenholm, Attendant,	-	1	20
Philomène Goyette, Attendant,	1	11	10
Jessie A. Rand, Night Watch,	3	8	11
Hattie Halladay, Farmers' Dining Room,	10	7	14
Hattie Gamwell, Centre,	1	-	24

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33. Officers and Employees — Concluded.

NAMES.					Years.	Months.	Dayı
Thomas C. Powers, Assistant Ste	ward	١, .			10	11	11
Carrie J. Gamwell, Centre, .					i -	10	17
Lillian M. Douglass, Cook, .					3	4	22
Nellie Clark, Assistant Cook, .					7	l - i	27
Mary Sweeney, Assistant Cook,					-	6	1
Anna Works, Assistant Cook,					-	2	15
Mary A. Carnes, Rear,					1	8	_
William C. Hall, Assistant Engi	neer,				19	5	17
Nicholas Riel, Night Engineer,					9	2	25
Walter E. Pillinger, Watchman,					10	9	29
Sifroi Belville, Carpenter, .					14	10	7
Walter Tower, Carpenter, .					8	3	_
Alfred Parenteau, Painter, .					19	. 6	18
David Mercier, Coachman, .					8	_	14
Benjamin Rockwell, Assistant Fa					17	9 :	
Julius Freeman, Assistant Farme					7	7 '	24
Henry Wilson, Assistant Farmer					5	10	-8
James Madden, Assistant Farme					ğ	5	29
Eugene Sullivan, Assistant Farm					9	10	
William C. Albray, Assistant Fai					_	10	27
James McClellan, Car Boy, .	,	•	•	.	1	11	30

AN ADDRESS

DELIVERED BEFORE THE

Berkshire Medical Institute,

NOVEMBER 24, 1863.

BY PLINY EARLE, A. M., M. D.

UTICA, N. Y.
ROBERTS, BOOK AND JOB PRINTER, CO GENESEE STREET.
1867.

ADDRESS.

PSYCHOLOGIC MEDICINE: ITS IMPORTANCE AS A PART OF THE MEDICAL CURRIC-ULUM.

"The care of the human mind is the most noble branch of medicine." Thus wrote Grotius two hundred years ago. But in the declaration of this proposition, the great philosopher of the Netherlands was rather a prophet than an expositor of the opinions of the age in which he lived. He was far in advance of his time. He was the seer who lifted the mystic veil that ever separates the future from the present, and whose anointed vision penetrated the abyss of prospective years, and revealed that which was to be; alas! that which even yet is to be.

How remarkable a comment upon the language of the Dutch author is furnished by the history of the period intervening between him and ourselves! For nearly two centuries after that language was used, the practice of the world stands as a permanent proof that the opinion therein expressed met with few if any adherents. Throughout all Christendom there was no practical evidence of the prevalence of such views. Over all the territory of civilization there was no spot illuminated by that method of treating insanity which must be the inevitable consequence of an actual and general belief that "the care of the human mind is the most noble branch of medicine." A darkness as of Egypt is spread like a funeral pall over those two centennary cycles. Nowhere do we find any evidence that

the opinions of either physicians or the people at large coincided with that of Grotius, but, everywhere, the treatment of insanity and of the insane was almost wholly removed from the domain of the medical profession, and given over to gaolers and to their peers in public or private stations. "The most noble branch of medicine" was transferred from the doctors to the turners of the key. The materia medica of the regular profession was forsaken, and another, better adapted to those who possessed the prerogatives and exercised the functions of "the most noble branch of medicine," was substituted in its place. Whips were the stimulants; solitary confinement the sedative; manacles, leg-locks, straightjackets, fetters and chains the astringents. Iron, indeed, was the universal tonic; and it was administered with a liberality that knew no bounds. Ferruginous preparations were everywhere about the patient, but, being externally applied, they acted as a tonic, or strengthener to the turnkey physician, rather than to the unfortunate person under his care. Iron, in ponderous bars, was at the window; iron, in massive bolts and unbreakable locks, upon the door; iron, in unrelenting staples, in the floor or the wall; iron, in blistering circlets about the ankles; iron, in cable-like links between the feet; iron, in manacles at the wrists.

And thus, with his chalybeate agents, the turnkey for two long centuries remained the sovereign of the dominions of "the noblest branch of medicine," and could say, in the language attributed by Cowper to Selkirk,

"I am monarch of all I survey; My right there is none to dispute."

But at length that monarch was jostled upon his throne. Two daring spirits—Pinel, in France, and Tuke, in England, the former a physician, the latter a

philanthropic merchant—rose in rebellion against the firmly seated autocrat, and began the labor of wresting his dominions from his power and transferring them to their legitimate sovereign. The conflict thus begun has been a "war of the roses," but they were roses with many thorns.

More than half a century has elapsed, and still the contest rages. The old chieftain still holds a section of the citadel, and commands his minions to "hang out the banner on the outer wall," for "the cry is, still they come." The turnkey and the physician now wear a divided crown in the realm of "the noblest branch of medicine." The former still wields his sway in the gaols, garrets, cellars, out-houses, or other miserable receptacles where, even at this moment, and in our own country, with all its vaunted civilization and philanthropy, thousands of insane persons are dragging out a wretched existence, many of them laden with the old implements of torturing restraint. The latter hold the hospitals, those monuments of benevolence and enlightened humanity.

As for the medical schools, they are upon neutral ground. Neither the physician nor the turnkey considers them worth the holding. True, some three or four raids, in the shape of summer or sub-courses of lectures upon mental disorders, have been made upon them by the physicians; but, in every instance, the invading party was so weak that a retreat was soon ordered, and the territory was again abandoned to its position of neutrality. But—all honor to whom honor is due—at length, in the autumn of 1863, the Berkshire Medical College came manfully from its stronghold, and surrendered unconditionally without a battle.

But let us drop metaphor and use the language of fact. In the medical schools it is considered necessary

to instruct the student in the nature and treatment of varicella, a disease productive, at most, of but brief annoyance, but he may remain in total ignorance of mental alienation, a disorder liable to prove permanent, and wholly destructive of the usefulness in life of him whom it attacks. The tyro on the college benches must be enlightened in the mysteries of dressing the incised finger of the luckless lad whose jack-knife could not discriminate between shingle and flesh, but he may go through his medical course, and bear away his diploma and his title, without ever having read, or heard from the lips of a professor, one solitary word upon a disorder which takes from man the high prerogative of reason, often reduces him to a level with the brutes, and casts him, not merely as a useless thing but as a positive incumbrance upon society. It is an inconsistency, as strange as it is great; an anomaly; almost a playing of Hamlet with the character of Hamlet left out.

Why has this condition of things been so long permitted? The answer to this question is doubtless mainly to be found in a very general practice among men. In nearly every sphere or place where an unconscious practical estimate is made of the psychic element of man—the mind, the soul, the spirit; or by what other name soever it may be designated—its value as compared with the corporeal element, or even with external material things, is placed so low that the insane patient at Bloomingdale was not far from right when, being present at divine worship and hearing the pastor quote the scriptural query—"What will a man give in exchange for his soul?" he promptly rose and very gravely responded: "Two and sixpence."

Men closely scrutinize persons who desire to borrow their money, but are almost heedless in regard to those to whom they lend, for training, the hearts and the intellects of their children. They seek a skillful blacksmith, when work by an artizan of that craft is required, but exercise too little care and caution in selecting the moulders of character, and the ministers to the mind. What, judging from the unwritten history of New England, appears to be the essential qualification for a teacher in the public schools? Formerly, ability to "lick" the largest boy pupil; of later years, relationship, anywhere from sister to tenth cousin, to the "prudential committee," or more frequently to that honorable officer's wife. The emoluments in the three occupations technically called the "learned professions" are at a maximum in law, a large part of the province of which is to regulate the possession of property; at a medium in medicine, which mainly deals with the body and its diseases, injuries and defects; and at a minimum in divinity, the sphere of which is in the psychic element of our being, and among the awful mysteries of a future Who, of transitory appealers to the public, in large cities, attracts, as a general rule, the largest assemblies, the acrobat or the astronomer, the dancer or the divine, the juggler or the geologist?

In defense of the persistent practice of the medical schools in condemning psychological medicine to banishment from their borders, it may be argued that insanity is of so rare occurrence that the young physician may practice for years without a call to prescribe for it, and the time devoted to the acquisition of a knowledge of its nature and treatment is consequently lost.

This argument contains three distinct propositions, either expressed or implied. First: *Insanity is rare*. The census of the United States, in 1860, made the number of insane persons twenty-four thousand; but it may very satisfactorily be proved that these figures are

far too low. It is not unlikely that the actual number approximates forty thousand. Certainly the disorder cannot be very rare. With a thousand cases of smallpox in New York and Brooklyn, would it be thought, by the residents of those cities, that small-pox was rare? yet the insane either in those cities or belonging to them, are not fewer than the number mentioned. But, for the moment, let it be granted that the proposition is Now follow the argument to its logical conse-Is not coxalgia rare—much more so than insanity? yet what medical student neglects the study of coxalgia? and what professor of surgery omits it in his What is the average number of cases of variola coming under the professional care of country practitioners? Probably not one in five—perhaps ten— But where is the medical school which discards the teaching of the characteristics, the pathology and the therapeutics of variola? What is the relative proportion between the number of physicians and the annual number of operations for strangulated hernia? Presumably, not less than fifty to one. Hence the chances are, that any young physician settling in practice will not be called upon to perform that operation in fifty years. Yet, so far as my knowledge extends, every professor of surgery is especially careful minutely and thoroughly to teach the anatomy of hernia, and the proper method of operative treatment. Is not the necessity for tracheotomy exceedingly rare? But is this infrequency considered a sufficient justification for the omission of tracheotomy from the subjects taught in the schools?

Similar questions might be asked relative to other operations and diseases in regard to which no medical faculty fails to give competent instruction. The theory of the schools ought to be—I believe it is—that the

medical graduate should be qualified for any exigency or emergency; that he should be prepared for any and all possibilities. How then can mental disorders, though rare in comparison with some diseases, yet frequent as compared with others, be disregarded in their curriculum?

The second proposition of the argument is: The young physician may practice for years without a call to prescribe for insanity. Yes: he may. It is not beyond the bounds of possibility. By a combination of fortuitous or favorable circumstances, almost any gauntlet may be run with impunity. But, as has been shown, the disorder is not infrequent. No one can claim prospective exemption from it. All are liable to its invasion, some, it is true, more than others; and many causes, some of them of no insignificant potency, are constantly tending to produce it. Who can tell when, or where, or in whom it will next appear? Hence the probabilities are not very great that the young practitioner will for a long period escape the responsibility of some action in relation to a person suffering under mental derangement. I have granted, however, the possibility of such escape. But, in return, I shall now claim the opposite possibility, namely: that the first patient of the physician entering upon practice may be an insane person.

Let us suppose a case. Dr. Blank, who has never gained any knowledge of mental alienation from either lectures or text-books, settles in a country village. He puts his office in order. The table is laden with books. A case of surgical instruments, perhaps accidentally left open, lies alarmingly near at hand. His diploma, in which he is rendered no less illustrious than the gilded frame which surrounds it is lustrous, hangs upon the

wall. Upon a shelf, a number of bottles of medicine, like the broken tea-cups in Goldsmith's Country Alehouse, "glitter in a row." The important sign—"Dr. Blank"—is given to the door, the winds, and the public. All his necessary surroundings arranged, the doctor sits down and yields himself to hope, expectation and the newspaper. But expectation blurs the letters, confounds the words, and takes from the sentences their signification. Thus passes the remainder of the day. But the doctor likes poetry, and before he retires for the night repeats, in honor of a British bard:—

"O, Solitude! where are the charms That sages have seen in thy face?"

Whether he finishes the stanza or not will depend somewhat upon his temperament:—

"Better dwell in the midst of alarms Than reign in this horrible place."

But the morning of the second day opens with brighter prospects. That thing for a life memory, the first customer, comes. The doctor is called to two patients, both of them men, and each presenting a case of recent insanity. One of them is highly excited, furious, raving, tearing his clothes, destroying furniture, and asserting with much force and positiveness that he is "President of the United States, High Priest of Jerusalem, Emperor of Europe, Asia and South America, and Julius Cæsar." The other sits silent and motionless. His hands lie as if nerveless in his lap. His head is inclined, his eyes dejected, gazing listlessly toward the floor, and his countenance betrays the most abject melancholy. Being urged he speaks, but very laconically. and the sum of his utterance is, that he has neither brain nor stomach, that he has no hope of salvation, and that all mankind are to be destroyed in consequence of his transgressions or short comings.

Now, what will the doctor do?

A man of some local celebrity as a teacher, in Massachusetts, and within the last fifty years, was one day appealed to by a pupil for a solution of one of the propositions in his arithmetic. The teacher took the book, and having read the example, handed it back to the boy, saying: "I can't do that 'sum;' it wasn't in the arithmetic that I studied."

Isn't Dr. Blank in a similar predicament? Can he "do that sum" which is before him? Were the President of the United States, the High Priest of Jerusalem, Julius Cæsar, the destruction of all mankind, and no stomach or brains, in the book that he studied? Can he conscientiously endeavor to give, in the two cases, suitable, discriminating prescriptions or advice, based upon knowledge, and directed and determined by a sound judgment? The responsibility of the first important prescription, even under the most favorable circumstances, lies heavily enough upon the mind of every sincere, earnest, cautious and not over-confident beginner of the practice of medicine. Hence, under the conditions of our hypothetical case, are we not justified in the inference that the young doctor will cut the Gordian knot, not untie it, by the brief direction: "Send them both to the hospital?"

In my opinion that decision—and it is not easy to perceive how any other, under the circumstances, could be arrived at—is unjust toward the patients, and the offspring of injustice toward the doctor who made it. As an illustration of professional science, it is parallel with the order of a physician in one of our large cities, who, as it is said, being called out of town for the day, directed a student to visit his patients, to bleed

all who lived on the right hand side of the street, and give cathartics to all upon the left. It is far less logical than the decision of the medical student who, upon being asked at his final examination, "What would you do in the case of a man blown up by powder?" answered, "I would wait till he came down."

Those patients were Dr. Blank's patients, and, under the circumstances, each party had its rights—the patients the right to expect an attempt at restoration based upon a reasonable sum of knowledge respecting their maladies; the doctor, the right to all the reputation which, if the patients were curable under appropriate home treatment, could have been secured by curing them. More important still, perhaps the doctor had his duty. His diploma contained no reservations, no exceptions in favor of mental disorders. Was it not his duty under this broad authority granted him by the college, to save those patients from the hospital, provided that this could have been done if he had received a reasonable amount of instruction adapted to the emergency?

But it may be argued that this position is wrong; that Dr. Blank acted discreetly, wisely, right; that the hospitals have been specially provided for the insane, and most of them liberally furnished with the means adapted to their peculiar treatment, and hence are the only proper places for them. It must be acknowledged that he acted discreetly. No discreet man, if blindfolded, attempts to ford a deep river or to run through a burning city. He acted wisely, because no wise physician tampers with diseases of the nature of which he is ignorant. Hence, under the circumstances, he acted right. viewed from the stand point of the duties which the profession owe to the people, his action, in my opinion, was erroneous. He ought to have been qualified to grapple with the disease.

To a superficial observer, especially in Massachusetts, the argument touching the hospitals is not without its plausibility. But there are few if any other States so well supplied with hospitals as Massachusetts. All the establishments of that kind in the country can accommodate but about eleven thousand patients; while, as we have already seen, the aggregate number of the insane is not less than twenty-four thousand, probably over thirty-five thousand. It is doubtless within bounds to estimate that there are no less than twenty thousand either at large or confined in the unsuitable receptacles heretofore mentioned: and of these Massachusetts has a liberal share. Again, because there are hospitals, it does not necessarily follow either that every insane person should be taken to them, or that medical students should be exempted from the study of the disease. There are hospitals for diseases of the eye; but does every person suffering from ophthalmia resort to them? or are those diseases wholly disregarded in the medical colleges?

But, in this connection, the chief arguments in favor of collegiate instruction in mental disorders, are, first: the prevention of the necessity of the removal of patients to the hospitals, thus relieving the pressure upon those institutions; and, secondly: the making of enlightened home treatment accessible to the thousands who, for one reason or another, are never placed in hospitals excepting under the pressure of absolutely compelling exigencies, and as a dernier resort. There are many cases of recent insanity which, under physicians competently versed in the disorder, might be cured at their homes. Many are so cured; but the assertion is true of a not inconsiderable percentage of those who are taken to the hospitals. For the last twenty years the superintendents of the hospitals have, in their an-

nual reports, constantly been urging the importance of an early resort, in cases of insanity, to the curative institutions, and pointing out the dangers of delay. Were all physicians in general practice properly instructed at the first great sources of their prefessional knowledge, the medical schools; were they in possession of merely such information as can be condensed into a dozen lectures, there would be no necessity for this constant appeal, so far, at least, as regards all cases in which their assistance or advice is sought. They could then act or advise more understandingly, and there need be no reason, certainly not on the part of the profession, for injurious delay in seeking the advantages of hospital treatment.

But in some places this unintermitting exhortation in the annual reports has been effective to an extreme. There has been an empressement, an alacrity, a haste in the removal of patients to the hospitals, such as would lead to the conclusion that the disposition of them was determined under circumstances similar to those in the case which we have supposed. What have been the consequences? Some of the patients have recovered so soon, and with so little medical assistance, as to prove that they ought not to have been removed. They would have recovered at home. Others have died within so short a period that their removal was clearly demonstrated to have been injudicious, improper. Fatality was hastened, doubtless in some instances caused, by the exertion and fatigue of the journey. How frequently we meet, in the annual reports, such expressions as the following: "Two patients were in articulo mortis when they were brought to us." "One patient died on the day of his arrival." "Two patients died within three days after admission." "Four patients, one man and three women, died within seven days after they were received." Nothing is hazarded in saying that, in nearly all of these cases, removal to the hospital was neither necessary nor proper. Doubtless, in many of them, circumstances rendered it expedient.

The evil having its origin in this source has, in some places, been so great that several of the superintendents have condemned the practice, and, in one or two instances, accompanied that condemnation with some One of them, in the course of his reinstructions. marks, says something like this: "Whenever there is reason to suspect the existence of active inflammation of the brain, the patient should not be subjected to the exertion of a removal to the hospital." "Reason to suspect the existence of active inflammation of the brain;" "ay, there's the rub." In the days of my medical pupilage, high mental excitement, vociferous and incoherent or irrational language, raving, and violent and destructive conduct were generally received as prima facie and positive evidence of active inflammation of the brain. To what extent this error has since that time been corrected, I have no means of knowing; but nevertheless it is very certain that without some understanding of the pathology of insanity, medical men cannot act, in such cases, with a sound and discriminative judgment. It is an absurdity to expect such action from them.

The third proposition of the argument, that the time devoted to the acquisition of a knowledge of the nature and treatment of insanity is lost, is really unworthy of notice. It is conditional, and dependent upon circumstances of great improbability. Even if it were not so the proposition itself cannot be said to be strictly true. No medical knowledge is wholly lost to the practitioner. It all tends to make him more accurate and skillful. It expands the mind, gives comprehensiveness to its powers, enlarges the scope of its activity.

But even if a physician should not be called to prescribe for actual insanity, he cannot escape from the neighborhood of the causes of it, and these will enable him to exercise his knowledge in this direction. medicine is, as the ethical codes allege it to be, a truly benevolent and charitable profession, he need not always wait for a demand for his services, but, by friendly advice, by prudent counsel, by an occasional word of monitorial caution among his employers, he may exert a salutary influence in suppressing those causes, in lessening their influence and preventing the full development of insanity when in its incipient stages. The immediate causes are operating everywhere, and no physician should be ignorant of them. Never, in all the annals of the past, was there a land more infested with them, than that in which we live. Never, throughout all history, was there a people more generally or to a greater degree subjected to their influence than are the Americans. Exhausters or depressors of nervous energy, we find them, like the many heads of a hideous hydra, in the various departments of human activity. The offspring, mostly, of civilization, they permeate society in all its grades, phases, and ramifications. Amidst the general bustle and whirl and tumult of the age, our time and attention are otherwise so fully engrossed that we do not notice them; or, noticing, do not heed. We are too busy to perceive how busy we are. We forget that the broad chasm by which we are now separated from the aborigines has been overleaped through the power of the brain, and that the brain cannot work forever with impunity. We overlook the fact that all the wonders of art, the marvels of science, the sublime and elegant accomplishments of literature, are the productions of that very activity of the miraculous organ within the head which, if not properly curbed and disciplined, leads to mental disorder.

In our endeavors to annihilate or to greatly abridge both time and space, to put learned heads upon the shoulders of the young, to compress the experience of a Methusaleh into our limited sphere of three score years and ten, to compass all knowledge and to conquer every thing within the power of art, to make our mother earth yield to us the secret history of the forgotten past, and, if not, indeed, to "bind the sweet influences of the Pleiades or loosen the bands of Orion," at least to compel the heavens, from our central sun outward, along the brilliant path trodden by the mental feet of Herschel and Leverrier, to the region in which the fixed stars rest in their changeless beauty, and the remotest nebula lies like a snowflake upon the sky, to open its broad expanse as a legible book before us, we are too unconscious of the fact that we are mortal, and that we are working with organs easily susceptible of disorder and decay.

He who accurately surveys the broad field of bodily and mental labor, may well be surprised that we have so few rather than so many wrecks of human reason. "It is better to live unknown," says Bayard Taylor, in allusion to literary labor; "It is better to live unknown, than to die of dyspepsia." To this aphorism may be added another. It is better to live in the contentment of the apathetic Turk, than to die insane in the raging current of the maelstrom of a more highly civilized society.

This brings me to another point. It is a well established fact that there is a constant parallelism between the progress of society and the increase of mental disorders: that, while in aboriginal races and people insanity is comparatively unknown, it prevails in greatest frequency in nations of the highest culture and refinement. All the producers and a large proportion of the

accessaries of civilization, tend to enlarge and render more susceptible the brain and the nervous system, while, on the other hand, with some exceptions, they diminish the muscles and the vigor of the circulation. The normal balance between the most important parts of the bodily organization is thus destroyed, and the way prepared for irregularity and perversion of their functions. It may, indeed, seriously be asked, whether the condition of highest culture in society is worth the penalties which it costs,—not the least of which is this unparalleled amount of mental alienation? I, for one, shall give no negative answer to the interrogation. would endeavor to preserve the culture, and to superadd the power and the will to diminish its pains, and prevent its penalties. Hence, through our medical schools, as well as from the hospitals, I would disseminate among the people a knowledge of the immediate sources of insanity, in the hope that, by this means, the evils alluded to might be somewhat mitigated.

Judging from much that has occurred in the course of the last twenty years, it would appear that it is a very general impression that there is no such thing as specialty of knowledge in psychological medicine; that while, for a just understanding in regard to all other maladies, a study of those maladies, severally, is requred, yet a knowledge of insanity is congenital, or intuitive, like the faculty of the "natural bone-setters." Everybody, of course, knows all about mental derangement. Every doctor, especially, is perfectly familiar with it, in all its phases and all its peculiarities; and, consequently, one doctor understands it just as well as any other doctor. It is nothing but "craziness," and all the world knows what that is. Yes: and all the world knows what a crushed arm or a broken thigh-bone, or "lungfever" is: and furthermore, all the world knows just so

much less about insanity than about the crushed arm, the broken bone, and the lung-fever, as it is easier to understand the nature and the functions of vital matter than to comprehend the being, the laws and the operations of mind.

But even in the courts of law, evidence has not been wanting that some of the judges and advocates have indulged the fallacy mentioned, apparently assuming the equality of all physicians as authority in mental disorders. Hence, in trials for homicide, where the plea of insanity has been raised in favor of the prisoner at the bar, many physicians who had neither studied the subject in the schools nor had any considerable practical acquaintance with it, and, doubtless, in some instances, without having read a treatise upon it, have been called, as experts, to hear the testimony and give an opinion deduced therefrom. Strange enough, those physicians, thus inadequately prepared, have obeyed the summons; and some of them have even sought it. result has been that a few of them, sagacious men, of sound judgment and some practical experience, have passed the ordeal with credit to themselves and no detriment to the profession; some, with sufficient sagacity to perceive, after they went into court, the meshes of the net, and the cat beneath the meal, were wise enough to be very suddenly and unexpectedly called home before the court was ready for their testimony; while but too many others, supplying their deficiency of knowledge by a complement of confidence, have tied themselves to the Promethean rock with a cord of blunders. and the lawyers have torn from them, strip by strip, their bleeding flesh, until nothing was left but dry and disjointed bones, dangling and rattling in the wind. Were psychological medicine properly taught in the schools, such mistakes, which bring odium upon the profession, would not be likely to occur.

It is some compensation as well as consolation to know that, in one case, at the first trial of which the prisoner was convicted, the confidence in his own opinion of one physician, was the indirect means of saving the prisoner's life. From a defect in his testimony, arising from that confidence, the court ordered a new trial, at which a verdict of "not guilty by reason of insanity" was rendered. The man was removed to a hospital, where he was pronounced insane by the superintendent, as well as by a legal inquest ordered, some months afterwards, for the purpose of investigating his condition.

There is another way in which physicians in general practice sometimes make mistakes which might have been avoided had they been better instructed in the phenomena of mental alienation. I allude to the attempts to write upon it.

"'Tis pleasant, sure, to see one's name in print;
A book's a book, although there's nothing in't;"

and although it may be replete with inconsistencies, errors, and the other offspring of defective knowledge. But of all the many subjects within the legitimate scope of the medical profession, insanity is the last which a prudent man will select for a theme, unless he can handle it with the comprehensive intelligence which is conferred only by somewhat mature study and some practical experience.

Some years ago the National Medical Association appointed a physician in general practice as a "Committee" on moral insanity, a subject which is the great quæstio vexata of psychological medicine. The physician who received the appointment was a man endowed with intellectual powers above mediocrity, and the report was not without its good points. It was highly

commended for its ability by reviewers whose knowledge of the subject was as limited as that of the reporter himself. Its author is no longer among the living, and I will tread as lightly upon his ashes as justice to you, to the subject, and to scientific truth will permit.

As if one of the prime difficulties of a department of medicine in regard to which the most learned of its devotees may almost assert that all their knowledge

"Is but to know how little can be known,"

were not sufficient, the reporter seized the occasion to wrestle with another, little, if any, less formidable; viz. the definition of insanity. In his discussion of the legal relations of the malady, he complains that physicians "refuse to define" it, "or submit any test in which" they "are willing that courts and juries may confide." He ought to have known that a vast amount of thought had been devoted to the subjects, by the ablest physicians in the specialty, and that the refusal to define arose from the inability to frame a perfect definition, and the refusal to submit a test, from the inability to discover one which might be submitted.

But he proceeds to supply the first deficiency complained of, as follows:

Insanity is "a disease of the brain by reason of which the functions of the mind are disturbed, perverted or alienated, without the consciousness of the intellectual and moral change which has occurred."

Unfortunately for this definition, a no inconsiderable number of the insane not only are conscious of their mental disorder, but frankly acknowledge it. Hence the definition came into the world still-born.

In respect to the second deficiency—the absence of any sure test of insanity—the reporter maintains that, in all cases of mental disorder, there are rational, physical, pathognomonic signs or symptoms of disease of the brain,—signs constituting what he calls "a physical entity;" and in reference to medico-legal testimony, in cases of alleged mental alienation, he says:—"Let physicians keep within their province—the presence or absence of physical disease—and they will then be invulnerable to the cross-questioning of legal counsel."

The proposition relative to physical signs is simply an error. It would not be difficult to find, within the next twenty-four hours, hundreds of insane persons presenting no such pathognomonic evidences even to the most acute observer. Hence this test fails. necessary consequence of this failure, obedience to the reporter's direction to physicians upon the witness stand is both an impossibility and an absurdity. Even on the supposition that pathognomonic signs of cerebral disease were always present in insanity, what counsel, what court, what jury would receive mere proofs of disease of the brain as evidence of insanity, unless the person is shown to be insane by his language, his conduct, his acts? What cross-questioning, or direct questioning counsel would for a moment permit a medical expert to evade every question relative to the mental condition of the person?

Let us suppose, however, that it is permitted, and a medical witness testifies that, in the case before the court, there are such and such pathognomonic physical signs of cerebral disease. In comes the cross-questioning counsel and asks: "But are there not many cases of diseased brain without insanity?" "Yes, many," replies the witness. Now, what is the value of that physician's testimony? He has "kept within his province;" I leave you to decide whether or not he has proved himself "invulnerable."

In respect to the principal subject of the report, it is unnecessary to enter into detailed comments. vexed question of moral insanity, a disorder the very existence of which is denied by many, was taken up by the National Medical Association, or, at least, under its auspices. Looking to so high, so honorable, and so learned a society, were not those who are interested in the question justified in the hope of a settlement of its mooted points? Had they not a right to expect an ex cathedra decision from which there could reasonably be no appeal? As evidence of the manner in which the primary disputed point—the existence of moral insanity—was settled, I make four brief extracts from the report—extracts neither garbled nor in any way so removed from the context as to affect their meaning. To these extracts your close attention is invited:

- 1. "It (insanity) may exhibit itself in the moral faculties being perverted, chiefly or exclusively."
- 2. "Insanity is a mental phenomenon, symptomatic of a physical disease having its seat in the brain, and hence can be neither intellectual nor moral, exclusively."
- 3. Insanity "includes any and every departure from health in the mental manifestations; and this may be either temporary or permanent, partial or entire, *intellectual* or *moral*."
- 4. "Moral insanity, co-existing with intellectual sanity, is a fable."

It is said that the members of a debating club once discussed the question—"Which has the most influence over children, the father or the mother?" and decided it in the affirmative. The report beats the debating club; for its decision is in both the affirmative and the negative. But, nevertheless, it has its excellencies, and among them are the two subjoined extracts, peculiarly adapted to our present purpose:

"Medical psychology, especially in its relations to juridical inquiries upon the subject of insanity, should be made an integral

part of medical education; and clinical teaching should be introduced into every asylum for the insane, as a measure of public policy, the duty to devolve upon the superintendent of each.

"Until a general provision is secured for the education of all students in medical psychology, no physician who has not special qualifications, both by study and practice in this department, should consent to give testimony in cases of alleged insanity, unless after consultation and concurrence with an acknowledged expert. The reputation of the profession will else be jeopardized, if not compromised and destroyed, by indiscreet opinions, which the courts are obliged to overrule, or which are often notoriously disproved."

Ten years ago, had I been called to address you upon my present subject, I should have argued, at length, the necessity for the arrestation of the practice of bleeding in mental disorders, as one of the primary reasons for the study of psychological medicine in the schools. Venesection, cupping and leeching have been carried to such an extent, in the treatment of insanity, as to lead to the supposition that they who thus practiced believed that the Creator made a blunder when he put blood into the veins and arteries of man. Certainly they could not have been aware of the extent to which the circulation acts as a regulator of nervous power, or of the fact that the withdrawal of large quantities of the blood is not unlike the removal of the pendulum from a clock, or the balance wheel from a watch or a steam engine. The evil is now so nearly abated that we need no longer dwell upon it here.

One more point, gentlemen, and my argument will be closed. When a person becomes insane it is very common for those by whom he is surrounded to attempt to manage him by falsehood and deceit. In view of the extensive prevalence of this practice, of the utter sacrifice of all truthfulness which is sometimes made in the pursuance of it, and of the deleterious consequences which are very sure to follow, I hardly dare to touch

the subject lest my language be considered intemperate. Suffice it to say that some persons whose veracity, under other circumstances, is unimpeachable, who apparently hold truthfulness and candor as cardinal virtues, and look with detestation upon duplicity and falsehood, do not hesitate to sacrifice the former and adopt the latter when under the responsibility of controlling a fellow being who is insane. I have often thought that if, by instruction in the schools, this pernicious practice could be abolished, it would well pay the way for the State to support a professorship of psychological medicine in every medical college within its jurisdiction.

Not being clothed with the sacerdotal stole, it is not my province, in this place, to ask whether a falsehood is less a falsehood because told to a person deprived of reason. I mention the practice not in view of its relations to morality, but its expediency—its adaptation to the object proposed. All experience proves it to be the very worst of methods, and he who begins with it will soon find that whatever of confidence the insane person had placed in him is wholly lost. Confidence gone, obedience and willingness to comply with requests or to follow advice, have gone with it. "You have deceived me once," says the insane man, "how can I know that you are not deceiving me now? I will have nothing to do with you."

Not the least, then, of the arguments in favor of making psychological medicine a part of the medical curriculum, is the hope of disseminating a knowledge of the fact that successfully to control the insane, no falsehoods should be told them, no deception practiced upon them, no promise made to them without due consideration; but "the promise being made it must be kept."

THE

PSYCHOPATHIC HOSPITAL

OF THE

FUTURE:

AN ADDRESS DELIVERED AT THE LAYING OF THE
CORNER STONE OF THE GENERAL HOSPITAL
FOR THE INSANE OF THE STATE OF
CONNECTICUT, JUNE 20, 1867.

BY PLINY EARLE, A. M., M. D., SUPERINTENDENT OF THE STATE HOSPITAL FOR THE INSANE AT NORTHAMPTON, MASS.

UTICA, N. Y.
ROBERTS, PRINTER, 60 GENESEE STREET.
1867.

ADDRESS.

Dr. Johnson, in the narrative of his journey to the Hebrides, remarks, in substance, that while, in obedience to the promptings of his better feelings, he would abstain from wishing that there might be a terrible storm upon the ocean, yet, if, in the course of nature, such a storm should occur, he would desire to witness it from one of the Scottish islands.

It is, gentlemen, with feelings not unlike those by which the literary and learned doctor was actuated, that I stand this day among you. Although, by that measure of good-will toward men which it is hoped I may not unreasonably claim, I should be deterred from the wish that any of the human race should become insane, yet, inasmuch as tens of thousands are thus afflicted, and there is every reason to believe that these will be followed by a certainly not undiminished succession, so long as civilization largely substitutes, for man, artificial agencies in lieu of the beneficent influences of nature, I thank you for the privilege and the pleasure of joining you in the ceremonies which commemorate the addition of one more hospital for the treatment of mental disorders, to the number already existing in our land.

The event, at any time and under any circumstances, would be of no trifling importance; but, occurring, as it does, at an epoch in the political history of the nation unfavorable, if judged by the annals of the past or by the ordinary processes of reasoning, to the establishment of institutions which are the offspring of philanthropy

and benevolence, and, furthermore, at a critical period in the progress of the general scheme for the amelioration of the condition of the insane, it is fraught with a significance broad, far-reaching, and full of cheering hope and confidence to both the philanthropist and the mental alien of the future.

The citizens of Connecticut may entertain a justifiable pride in the position held by them and by their State in the great humanitarian enterprise to the promotion of which the exercises of this day are devoted. If not the foremost they were among the foremost not only to perceive the necessities of the insane, but to work out the just results of their perceptions in the establishment of a hospital for the relief of those necessities. Of the now half-hundred institutions of the kind within the limits of the United States, the *fifth* was erected almost, as it were, beneath the actual shadow of the Charter Oak.

The Retreat, at Hartford, became early and widely known for the wisdom, the skill, and the success of its management; and, down to the present day, it has always been regarded as one of the best institutions in the country.

Poets and historians have written of the Age of Bronze, the Age of Iron, and the Age of Gold. In the sphere of the alienist there is yet another age, happily, for man, an age now past, and, it is to be hoped, forever past. It is the Age of the Lancet; the era in which mental alienation was almost universally treated by venesection, and when, in some trans-Atlantic hospitals, the patients were bled not only periodically but indiscriminately.*

^{* &}quot;The period of physicking continues from the middle of May, regulated by the season, to the latter end of September. Two bleedings, according to discretion, half a dozen emetics, if there

Let it ever be remembered, to the honor of Connecticut, that she furnished one of the first prominent opposers of this ultra heroic, this warlike method of treatment. Dr. Todd, the first superintendent of the Retreat, boldly resisted, by both theory and practice, the almost universal medical opinion of his day, at a time when such resistance required a strength of will founded upon a sense of duty, and a moral courage worthy of all commendation.

Connecticut, too, gave to the world and to the cause of the welfare of the insane, another physician of no less merit than him whom I have mentioned, and perhaps of still wider celebrity. I allude to the late Dr. Samuel B. Woodward, for many years Superintendent of the Massachusetts State Hospital at Worcester. Living at a time propitious for the success of his labors, carrying into his work intelligence, skill, industry, energy and perseverance, and by his writings giving to the people the results and the benefit of his experience, he exerted an influence perhaps second to that of no other man, and to that of but one other person, in creating that public opinion which has founded hospitals for the insane in nearly every State in the Union.

I have intimated that the present is a critical period in the progress of the enterprise for the full and appropriate provision for the necessities of the insane. This enterprise is of so recent origin that, hitherto, it has not been reduced to the definite forms of an established system. This is true not alone in respect to the relations between the hospitals and the different classes of

should be no impediment to their exhibition; and the remainder of the time, until Michaelmas, a cathartic once a week."—Haslam, p. 63, of Minutes of Evidence, etc.

"I have bled one hundred and fifty patients at one time."— Bryan Crowther, Practical Remarks on Insanity. the insane in the general population, but likewise in regard to the organization of the hospitals, and the modes of management pursued in the treatment of The question, foreseen for many years as an inevitable development of the future, whether all our institutions for mental aliens shall be hospitals, in the true signification of that word, or whether some shall be hospitals and others mere asylums, or special almshouses, has at length arisen. If, in the attempt at its solution, there is to be an antagonism of ideas, a controversy of opinion, and a war of words, that antagonism, that controversy, and that warfare have already begun. A discussion of the question upon its merits, although consistent with the general object of this discourse, would involve a length of time incompatible with the occasion, and consequently will not be attempted. will excuse, however, the delay of a moment upon the subject, for a few words believed to be at no other time or place more appropriate than upon this spot and at the present hour.

It has been asserted, if I mistake not, in places of great respectability and of high authority, that Connecticut would never provide for her chronic insane, establishments with the liberal endowment, the broad organization, and the efficient force of officers which properly belong to a hospital. It was said, substantially, that although she might thus supply accommodations for recent cases, she would withhold her generous and munificent hand from the chronic, and, if she regarded them at all, would give them the common dole of the pauper, in receptacles founded and furnished and managed upon the financial principle of the least cost to a given number.

Under these circumstances you will not be surprised to learn that, by many persons interested in the subject,

her course of action has been watched with no little interest and not without anxiety. Let her be thanked, and let the insane throughout her territory be congratulated, that these predictions have not been fulfilled. True to her history, and true to the spirit of the teachings of her eminent sons who have here been mentioned, she has settled the question, so far as she now can settle it, upon the basis of a just, a generous, a Christian philanthropy. She now lays the corner-stone of a hospital, the doors of which will be open to all, irrespective of the duration or the curability of their disorder. By this action she does much towards determining the character of the Psychopathic Hospital of the Future.

The principle of the accumulation or congregation of large numbers of the insane beneath one roof, how extensively classified soever they may be, and divided into separate families, in distinct halls or wards, has been objected to in some quarters as erroneous, and not the best adapted to the end in view. Upon this principle all the existing hospitals of the country are constructed. In diametrical opposition is the plan pursued at Gheel, in Belgium, where many hundreds of the insane are taken as boarders, a small number in a place, in the families of the villagers and the peasants of the commune. Thus, while at the one extreme, we have a congregation, or large family, on the other we have a colony of the insane. The principle of the latter, carried to its extreme, as in the commune just mentioned, has few advocates in Europe, and fewer still in America.

But, perhaps in accordance with the old maxim, "A mean is better than either extreme," a plan has been devised for the practical union of the two principles, in a central building for the sick, the excited, the demonstrative and the suicidal, and a number of small build-

ings, more or less remote, for the convalescent and the quiet.

The late Dr. Galt, Superintendent of the Hospital at Williamsburg, Virginia, took the initiative among Americans in the advocacy of this plan. He espoused its cause con amore, and has left behind him no inconsiderable number of printed pages devoted, with much warmth of feeling, to its commendation.

He died apparently without a convert. But, since his decease, the plan has found one or two advocates who, with the fervor and energy of sincerity, urge its claims to pre-eminence. Without an endeavor to go into the merits of the question, it may be permitted to me to express the opinion that, how well or how ill soever this plan might work for institutions largely endowed, it appears to me that the cost of the establishment, in both construction and daily operation, would be so large as to prevent its general adoption.

It is obvious, then, from what has already been said, that even in one of the fundamental principles of its existence, the true establishment for the insane, the Psychopathic Hospital of the Future is an institution the character of which is not yet definitively determined. Whether or not the present discordance of opinion will increase until the now prevalent plan shall be discarded, or greatly modified, is a question the solution of which is among the evolutions of time to come.

But, assuming that the principle of congregation will be adhered to in the future, as in the past, as a radical, elementary idea of the perfect hospital, we are prepared to give a cursory glance at existing institutions with reference to their approximation toward the perfection desired.

The hospital for the insane is an institution sui generis,
-(a truism applicable, indeed, to some extent, to estab-

lishments for many other purposes, yet equally applicable to but few). It combines within itself, to a certain degree, the prominent attributes or characteristics of several other classes of institutions. It is custodial, disciplinary, educational, medicative; and both its excellence and its success depend upon giving to these characteristics, respectively, the proper degree of prominence. In my opinion that degree has never, hitherto, been attained.

Of all the defects or imperfections of our hospitals, it appears to me that the greatest is the want of an organized, systematic routine of duties, or exercises, applicable to all the patients under the discriminating judgment and direction of the medical officers, and practically applied to a greater proportion of them than any such attempted organization has ever been applied.

The hospitals, now, are too much like mere agglomerations: they should become like crystals. Carbon agglomerated is charcoal; carbon crystalized is diamond. What charcoal is to the diamond, such, I believe, is the psychopathic hospital of the present as compared with the psychopathic hospital of the future.

The hospital, no less than the college, should have its established curriculum; and this should comprehend a course of exercises, hygienic, laborious, disciplinary, amusing, recreative, instructive and devotional. The patients should go from exercise to exercise as students from lecture to lecture. They would then be subjected, during a large part of the day, to restraining, diverting, and hence curative influences, instead of being left to lounge, apathetically, or to wander to and fro in their rooms or halls, subject to the wayward impulses of their disorder, as is now too generally the case with a large proportion of them. There is much reason for the belief that the full extent of both the restraining and the

curative power of what is termed moral treatment, have not yet been learned. The marvels wrought in the schools for idiots are suggestive of similar accomplishments among the insane, when, with a perfect organization, the patience and the perseverance exemplified in the schools just mentioned shall have wrought their perfect work in the psychopathic hospital of the future.

It may be alleged, as an argument against the possibility of the realization of these views and predictions, that the nature of insanity is such as to preclude a large part of the patients from participation in the exercises of so elaborate a system as that which is here proposed. The loquacious, the boisterous, the turbulent, the pugnacious, the destructive and the unclean must be excluded. To this it may be answered, that the system hoped for is precisely the thing to prevent loquacity, boisterousness, turbulence, pugnacity, destruction and uncleanness. All persons of much experience in hospitals must have learned that, almost universally, the insane possess the power of self-control, although they do not always exercise it. The exceptions are but very few. A cake will quiet the talkative and the boisterous. A picture from the magic lantern will suppress turbulence. With all the patients in a hospital seated at dinner, pugnacity is generally null, and the only destruction is the destruction of food.

If, under these circumstances, the demonstrativeness of insanity is subdued, it may easily be perceived that it may be subdued by the systematic and prolonged exercises of a perfect organization. Subdued thus for a while, the patient, as a general rule, would exert his self-control permanently, and cease his abnormal demonstrations.

But, extraneous to the hospitals themselves, there is one agent which acts as an obstacle to the perfecting of those institutions on the basis which is here predicted for them. That agent is public opinion. Hospitals for the insane are new institutions. They are almost wholly the growth of the current century. They are watched, and very properly so, with a scrutinizing, not to say a jealous eye, by the people. But the people, as a whole, know but little of the proper management of the insane. It is a subject upon which, unfortunately, the mass of even intelligent and educated persons are especially ignorant. Hence it is not surprising that the public are unprepared for some things which might improve the hospitals.

One would be surprised if, in a report from an asylum for the blind, he should read as follows: "We are fully satisfied that our pupils are capable of learning to read by the raised alphabet. We know that this method of reading greatly facilitates their general instruction while here, and will be of incalculable benefit to them in after life; but we leave it to the option of each whether he will learn it or not. If he manifests reluctance or indifference thereto, it is not required of him. No coercion is permitted."

It would sound very queer if the superintendent of an institution for deaf mutes should say to us: "The manual alphabet is very useful; in short, it is an almost absolute necessity; but if a pupil is annoyed by the endeavor to learn it, the task is not imposed upon him. In respect to all of our processes of instruction, each pupil is at liberty to participate in them, or not, as he pleases. We use no coercion."

Let the institutions mentioned adopt the principle of action thus set forth, and how long would it be before they would cease to be as crystals and become as mere agglomerations, devoid of system and destitute of order? How long before their pupils would become demoralized and quite as difficult to manage as the inmates of a hospital for the insane? and, furthermore, and quite as much to the point, how long would it be before the pupils would acquire a good education, the object for which they were placed in those institutions?

But how happens it that the superintendents of the hospitals for the insane often speak favorably of the effects of certain agencies, yet are very careful to add that subjection to, or exemption from, those agencies, is optional with the patient? The physician, rational,—or, at least, supposed so to be,—approves, commends, and recommends, but permits the patient, known to be irrational, to decide and, in effect, to prescribe or to withhold. In shorter terms, reason defers and submits to the judgment of unreason.

Take, for example, the agency of manual labor. universally eulogized as among the most potent of hygienic and curative means; and yet it is, perhaps, as universally asserted, or intimated, that it is never required of a patient except with his cheerful volition. It is generally understood, and I believe it to be a fact, that coercion to labor is not permitted in the hospitals. But there are some patients, perhaps,—having reference to the form of the disease, it might be said a class of patients—who, at a certain stage of their disorder, can be cured by labor, and, apparently, by nothing else. If they do not resort to it they become apathetic and incurable, and often drag out their lives, listless and imbecile, in the wards of the hospital. Very many have, as I believe, thus died who might have been cured by the means in question.

Now in these cases, and more especially where the patient has been accustomed to daily toil, why is it that the only medicament which, as is believed, will effect a cure, is not prescribed and administered? If the medi-

cal officer of a hospital were convinced that the restoration of a patient depended upon the action of a potion of calomel and jalap, would not that potion be given, whether taken voluntarily or involuntarily? If the patient required an emetic would it not be administered, often nolens volens? If he refused to eat, until death were threatened from starvation, would he not be fed, even, if necessary, under the coercion of the stomach pump? Certainly, yes. Drugs and medicines may be forced upon a patient until, so far as recipiency is concerned, he becomes a perfect apothecary's shop, and all is right; but any attempt to force him to the genial, wholesome and curative exercise of manual labor, is an outrage upon humanity!

Such is the unique and anomalous position in which, by the force of public opinion, the hospitals for the insane are placed. In permitting the patients indicated to remain uncured, rather than to breast and buffet the breakers of public opinion, by coercing them to restorative labor, the superintendents of the hospitals doubtless anoint their consciences with the balsamic oil of the belief that of two evils they choose the less. Perhaps, for the present, their choice is right. But in the time of the psychopathic hospital of the future, the people will believe that any man whose knowledge and judgment are sufficiently good to properly deal with drugs and medicines, in their delicate relation to the great issues of life and death, may safely be entrusted not alone with the decision of the question whether manual employment will be beneficial or detrimental to his patient, but with the power of action in accordance with that decision.

If from all, or from anything, that has here been written, the inference should be drawn that I have overlooked or disregarded the merits of existing hospitals, their numerous improvements within the last thirty years, or the patient and persistent labors of their super-intendents, he who draws that inference is mistaken. Relative excellence, not the actual or the positive, is the burthen of this discourse.

Institutions, like nations, are slow of growth. The old age of the individual man is infancy to them; and the measure of their existence is centuries rather than years. Hence, few would be guilty of the absurdity of supposing that hospitals for the insane, just springing, as it were, from swaddling clothes and the cradle, have nearly arrived at the stature and the maturity of perfect manhood.

As regards the hospitals at the present time, it may be remarked that I am fully conscious that in many of them a large amount of labor is performed by a part of their inmates; but this consciousness is accompanied by the belief that the amount might be much increased, with advantage to those who should accomplish it. Religious exercises upon the Sabbath are established in many; but is it not the fact that the number of patients in attendance could be largely augmented, not only with propriety but with manifest benefit? Devotional exercises of some kind on the evenings of secular days are likewise regular in some; but the practical defect just intimated is still more apparent here than in the gatherings for Sabbath worship. Lectures and exhibitions with the magic lantern have been, to a considerable extent, introduced; but there is a tendency to give too much prominence to mere pictorial effect, without a sufficient address to the intellect. Schools, upon a small scale, have been tried in some of them, and abandoned, in my opinion, without a sufficient test of their utility.

Recently the healthful and disciplinary exercise of light gymnastics has been adopted in at least one hos-

pital. This is progress in the right direction; and, if it be regularly practised, by a large proportion of the patients, the exercise will undoubtedly be very useful. At one hospital, within the last three months, a course of lectures upon insanity has been delivered before an audience of more than two hundred and fifty patients. This, likewise, I believe to be an advance toward the right point.

Bowls, billiards, base ball, foot ball, croquet and various other games and amusements, both without doors and within, are more or less generally furnished for the patients; but their use is limited to too small a number, and it only too often occurs that most of them are permitted to fall into comparative disuse.

But in regard to all, or nearly all, of these means, the objection is that they are *incidental* and *spasmodic* rather than *established* and *regular*; that they are left too much to impulse or inclination, instead of being a positive duty; and that they are not applied to so large a proportion of the patients as they might be.

When the defects which I have mentioned shall have been thoroughly remedied by a comprehensive curriculum, a complete organization, a perfect systemization and an efficient administration, the charcoal, now just ready to begin the process of crystalization, will have become the diamond, and the world will possess the PSYCHOPATHIC HOSPITAL OF THE FUTURE.

PROSPECTIVE PROVISION

FOR

THE INSANE.

BY PLINY EARLE, M. D.,

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UTICA, N.Y.
ROBERTS, BOOK AND JOB PRINTER, 60 GENESEE STREET.
1868.

ADDRESS.*

Of all the subjects legitimately belonging to the specialty of psychiatry, or immediately connected with it, no one has, for the last few years, occupied a more prominent position in the United States, or called forth a larger number of words, oral, written and printed, than the proper provision for the custody, care and cure of the insane.

In venturing to contribute another rivulet to this verbal Niagara, I do not profess to be able to say anything new; and my only attempted excuse shall be that I speak to an association which, whether it be regarded collectively or, with some exceptions, individually, does not stand in the bed of the stream of that which has been written, but, dwelling upon the plains of the bordering shores, has caught only the dewy droppings of the mist ascending from the torrent. Let us hope that those dews have been refreshing, and that some eye, more fortunate than others, has detected a rainbow extending its arc of beauty, of hope, and of promise above the somewhat turbulent waters.

In this country during the quarter of a century next preceding the year 1855, or thereabouts, it appeared to be universally recognized as, in practice, a principle, and in theory, a postulate having all the self-evidence and the force of an axiom, that, for the proper treatment of the insane, the first measure is to collect them in hospitals adequately supplied with all the munitions which can

^{*}Read, by request, before the Massachusetts Medical Society, at the anniversary meeting, in Boston, June 2, 1868.

contribute to the restoration of mental soundness. This principle was acted upon, and hospitals multiplied apace, until the enterprize received a check by the breaking out of the recent political rebellion. The exigencies of the civil war were such that our people have been, still are, and for a long time must continue to be heavily burdened by taxes. For this, and perhaps for other reasons, the formerly admitted principle has lost its universal hold upon the faith of the people, and has been questioned in more than one respect.

Various propositions of change have been made, most of them based upon limited practical operations in Europe. Meanwhile, the number of the insane in the United States unprovided with hospital accommodations has largely increased. Hence, at this moment, while there are probably from thirty thousand to thirty-five thousand insane not in the hospitals, the subject of their proper treatment has become not merely a question to be answered, or a proposition to be demonstrated, but, rather a problem to be solved.

The suggested modifications of what was thought to be the measurably established plan of hospitals for all, may be included under the following heads.

- 1. Hospitals for the curable alone.
- 2. Asylums for the incurable.
- 3. Colonies, or the Gheelois plan.
- 4. Central hospitals, each with neighboring cottages.
- 5. Family treatment.

The first two propositions above mentioned involve the important question of separation of the insane according as their disease is chronic or recent, or rather, as it is supposed to be curable or incurable. On the one hand it has been asserted that this separation may be made if not with actual benefit to both classes, at least with no detriment to either; while, on the other, it has been maintained that it is injurious to both. Dante has been quoted and misquoted, interpreted and misinterpreted, translated correctly and translated incorrectly, for the purpose of depicting the horrors of an asylum for incurables. But there is still room for the opinion that the door superposed by that inscription of awful signification and solemn warning,

"Lasciate ogni speranza," &c.,

as described in "The Inferno," was not the door of an asylum for the chronic insane. Yet as Dante is dead, and as he died and left no further sign upon the subject, and as Longfellow, in his translation, has no notes or comments thereupon, the correctness of this opinion cannot well be proved.

It has always appeared to me that the greatest objection to receptacles for the incurable, the objection, indeed, paramount not only to all others, but to all arguments in favor of such receptacles, is their liability to degeneration, neglect, and, as perhaps a necessary consequence, the abuse of the inmates. Pecuniary economy is not merely the point of departure, but, as it were, the very germ itself of their origin. hospitals, fully officered and completely equipped, cost no more than those asylums, no man would think of suggesting the construction of the latter, and the separation of the insane into the two classes mentioned. Based upon the principle of frugal if not parsimonious expenditure, they cannot command the services, for officers, of men of superior qualifications, and, even if they could, the mass of incurable disorder within their walls would present no sufficient stimulus to retain such men. The same influences would have a similar effect upon the boards of trustees or managers, and gradually, in the nature of things, interest, if it ever existed, would

flag, and neglect and abuse must almost necessarily follow. The history of such receptacles in Europe generally confirms the truth of this position.

Nevertheless it is not difficult to imagine an asylum for incurables so excellent that the position and condition of its inmates could nowhere be improved. Superintended by a man of special talent, taste and tact, of untiring industry and absolute devotion to his calling, and whose ambition and benevolence would both be sufficiently satisfied in making the mass of afflicted humanity under his charge as comfortable as circumstances would permit, an establishment of this kind might be made to meet all demanded requirements. But the number of such men whose services could be secured is small, and asylums nearly approximating such perfection must ever be but very rare exceptions. That such have existed, at least in one instance, we have the authority of one of the profoundest thinkers and one of the purest spirits among the German psychologists. I allude to Dr. Zeller, of the hospital at Winnenden, in Wurtemberg, whose remarks upon the asylum directed by Dr. Hayner, at Colditz, justify the assumption of this high position for that institution.

Perhaps it might truly be said of establishments for the insane, whether hospitals or asylums, as Pope says of governments:—

"Whate'er is best administered is best."

While it requires no great brilliancy of fancy to concieve an excellent asylum for incurables, it is equally easy to imagine a hospital for curables the condition of the inmates of which could hardly be made worse. At any rate, the condition of the inmates of a well managed asylum is better than it would be in a badly managed hospital. But in the prosecution of a scheme

so broadly comprehensive as the proper guardianship and treatment of the insane, it is necessary to act upon general rules and not upon exceptions. In the endeavor to select a method of custody, care and cure, we must attempt to fix upon one the conditions of which are such as will be the most likely to *insure* effective management.

3. The only existing example of the Colony, or that which has been termed the "free air plan," is that of the commune of Gheel, in Belgium, where many hundreds of mental aliens are placed as boarders, from one to four or five in a family, in the houses of both citizens and peasants. This great receptacle for the insane has existed for centuries, but has not been brought conspicuously into notice until within the last few years. The legend of its foundation by St. Dympna, a beautiful young woman who, in the seventh century, fled from the presence and the home of an incestuous father, in Ireland, and here devoted her life to the care of the insane, throws an air of romance about this unique commune, the effect of which must be guarded against in the endeavor fairly to estimate the merits or the demerits of the place as illustrative of a peculiar method of provision for the insane.

I passed two days in Gheel, in 1849, and drew most of my information respecting the method from Dr. Parigot and Mr. Vygen, the Commissaire de Police. They kindly conducted me to many houses, both in the village and among the peasant farmers, where insane persons were at board. My impressions of the place were not favorable, even for the class of the insane who by law are alone permitted to be received—the chronic, the incurable and the quiet—and much less so for other classes—the recently attacked, the curable, and the highly excited. Since that time, the objectionable

features have been somewhat modified and diminished, by the introduction of the element of another method, in the erection of a central building which, to all intents and purposes, is an asylum or a hospital. Hence, so far as Gheel has been improved, the improvement is due not to the method of colonization, or segregation, but to the method of congregation and concentration.

Aside from agriculture, the care of the insane is perhaps the chief financial interest of Gheel, and, like all other pecuniary interests, it is managed with a primary view toward the profits. A system of brokerage has been established in the business, and the men engaged in this, like the "middle men" in all departments of trade and of commerce, hold, to a very great extent, the reins of power. The financial interest is thus paramount to the philanthropic interest; and these men will never permit benevolence to interfere with their pecuniary welfare, any more than the shoemakers of Lynn will permit the world to be supplied with shoes—were such a scheme supposable—manufactured gratuitously by a benevolent association.

Of the nearly seventy hospitals, asylums, and other special receptacles, counting Gheel as but one, which it has fallen to my lot to visit, there are but two at which I saw insane persons in any way personally restrained by heavy chains. These are Gheel, and the Timarhané, at Constantinople. At the latter a man was chained by the neck to the wall. At the former the chains were in the form of fetters; and, in one instance, the large iron rings encircling the ankles had abraded nearly all the skin beneath them and rested upon a raw and bleeding surface. The man wearing them started up from his grassy bed beneath a hedge, as, upon turning a corner, I suddenly and unexpectedly came near him,

when rambling from the village toward the church of St. Dympna. Whether the good saint, during her mortal life, approved of this method of security from elopement, neither history nor legendary lore can tell. But, so far as these cases illustrate that which has been denominated the "free air plan," they are open to the comment that the insane can anywhere be permitted to have free air by taking away from them free legs.

At one of the houses, a patient slept in a place which, wherever situated in the building, no New England farmer or mechanic would think fit for the lodging of any of his household, other than the cat or the dog; and, as it was, it was too far out of the way even to be thought of for that purpose. It was a low, three-cornered opening in the attic, formed by the floor, the slanting roof and an adjacent room. Ascending a ladder to reach it, the patient was obliged to crawl into it upon all fours, and there he found his bed of straw. The question naturally arises,—If, in the comparatively small number of houses that I visited, there was one such dormitory, how many were there in the whole commune?

I do not doubt that a large proportion of the insane at Gheel are treated kindly; and Dr. Parigot, who knows the place more thoroughly than any other person whose writings upon it are familiar to Americans, attests to the benevolence and the beneficence which are there manifested. But, while admitting and acknowledging this, it cannot reasonably be denied that the primary and principal motive of the persons who receive the insane into their families is the prospect of pecuniary profit. And as the Gheelois are probably like other people, the tendency will be to make the most of their opportunity. Taking this in connection with the fact of the existence of the class of brokers, as above men-

tioned, it may readily be perceived that the Gheelois method, as it there exists, has too strong a resemblance to the old practice of setting up at auction the board of the town's poor, and selling it to the lowest bidder.

But a very few years before my visit, the chief officer of Gheel—the burgomaster—had been waylaid and killed by an insane man; and, at some former time, the life of a child had been taken by another patient.

These acts of homicidal violence are not mentioned in special condemnation of the plan of colonization. The history of even the best class of hospitals is but too often checkered by similar events; and, in them, patients have killed not fellow patients alone, but attendants, and in one instance, in Germany, the superintendent. It is desired merely to show that the method at Gheel does not *prevent* those fatal occurrences.

From what has been said it is evident that the whole picture of Gheel does not consist in a fanciful foreground of the legend of St. Dympna. In my view the most important objection to it, as a method, is, that there is greater liability to the abuse of patients than there is in hospitals. The more the insane are segregated and scattered, the less directly can they be subjected to supervisory inspection; while, on the other hand, the number of caretakers is increased, and consequently the probability of abuse correspondingly augmented; for among ten persons, anywhere, the chances of a cruel master are twice as great as among five persons.

But perhaps the most decisive of all arguments in regard to the method in question, is the fact that, although Gheel, as a colony of the insane, has existed for a time "whereof the memory of man runneth not to the contrary," it has never been copied. Situated at a point almost central between the observing French, the philosophical Germans, the religious and cautious

Scotch, and the practical English, it has remained, in effect, almost as unnoticed as if it were unknown, throughout the three-quarters of a century during which each of those peoples has been engaged in establishing, enlarging, and improving the hospital method of treatment. Is it possible that the physicians and the philanthropists of all those countries have been thus long groping in the dark, and that not until so late a period has the sun-light of truth fallen upon them as reflected from the humble church of St. Dympna?

4. An institution occupying a middle position between the two extremes—a hospital proper and the Gheelois method—has commanded the approbation of a not inconsiderable number of psychologists and humanitarians, and already some establishments conforming, to a greater or less extent, to this idea, are in opera-The cottages disconnected from the main building of the McLean Asylum, and furnishing a suite of rooms for each inmate, illustrate the first step of departure from the hospital proper in the direction of the Colony. But perhaps one of the best illustrations of the kind of institution in question, is the asylum and so called colony of FitzJames, at Clermont, in France. This is a private establishment, owned and conducted by the brothers Labitte. Upon, or connected with, a farm of five hundred acres, are three large buildings, accommodating about twelve hundred patients. One of the buildings is a hospital, or asylum, occupied by those who, for any reason, require restraint. The second is devoted to boarders for whom especial restraint is unnecessary; and the third, to the similar class of paupers. These buildings are furnished each according to its necessities for treatment, and the social position or the pecuniary means of its inmates. There are

commodious out-houses, workshops of various kinds, and diversified means and facilities for the amusement, entertainment, recreation, and employment of the patients.

So far as manual labor is concerned, this is, to a great extent, an independent and self-sustaining institution. Domestic industry prevents the necessity of much foreign aid. The extensive farm is cultivated chiefly by the patients, and the grain is ground upon the premises. Regarding the place with a special view to treatment, we find that, in its daily operations, "There is," to use the language of Dr. John E. Tyler, who recently visited it, "a constant interchange going on between the departments. If a person becomes restless, or boisterous, or unmanageable, in the colony, he is taken to the asylum. When one in the asylum becomes quiet and can be entrusted with his own liberty, and is capable of labor, he is at once transferred to the colony; and this is felt to be an incentive to self control by the inmates of the asylum."

5. It has been proposed to place the quiet incurable insane in families which, wherever situated, will receive them. This plan has been pursued to some extent in Scotland and in France. It differs from that at Gheel, principally in the wider separation of the insane. The greatest objections to it are: first, that the wider separation renders inspection by superior authorities more difficult, and consequently less efficient; and, secondly, that the primary and strongest motive on the part of those who receive the insane, will be pecuniary recompense. Doubtless a large part of those who might thus be distributed would fall into hands moved to gentle usage by not unloving hearts. But when we remember the very prevalent distrust, nay, even fear of the insane, it does not appear probable that philanthropy alone, or

even to any very considerable extent, will induce people to receive them into their households. At all events, progress in that direction must be slow.

Having thus very imperfectly noticed the several propositions, I proceed briefly to indicate my views in regard to the most appropriate disposition of the afflicted class whose welfare is under consideration. And here it may be premised, that the insane are not, like the victims of Procrustes, to be all brought to the requirements or conditions of one place or position. Hence the different classes of them may be cared for in several ways.

- 1. Some of the quiet incurables are as well provided for in their own homes as they could be elsewhere—and there they can remain.
- 2. There are not a few, who, having no homes of their own, or who, for some special reason, cannot well be cared for at their homes, but who do not really require the seclusion and the restraints of a hospital. These might well be placed as boarders in country fam ilies. Indeed, I think that some who are now in the hospitals might be so placed without danger to other persons, with no detriment to themselves, and, in some instances, with an augmentation of their content.

The propriety of this disposition of them is, of course, dependent upon the assumption of requisite qualifications and conditions of the families with which they may be domiciled, and that all for whom this provision is made shall be under the supervision of men delegated to the duty by the government of the commonwealth.

3. But, after the disposal of the two classes abovementioned, it will still, as I believe, be found that the great mass of the insane can best be provided for at institutions where they will be so congregated that the custody, care and supervision of them will be comparatively easy. There must be hospitals for the curable, if for no others; while, for the incurable, there must be either hospitals, asylums, colonies, or institutions containing some of the characteristics of the hospital and the colony.

But the method of colonization, as practiced at Gheel, even were it commendable, is probably impossible in this country. The active and enterprising Yankees, with bridle upon steam and a halter upon lightning, yet still whistling and chafing for greater speed, are not the quiet Flemish, plodding through plains of sand in the horse-cart ruts of ages. Whither shall we go, in any of the New England States, to find the township of ten thousand inhabitants who will harbor from a thousand to fifteen hundred insane persons, feed, lodge, clothe, protect and otherwise care for them, not, indeed, for fifty cents each, per week, as at Gheel, but even for three dollars and fifty cents, the sum paid by the commonwealth of Massachusetts for this provision for its beneficiaries in the State hospitals? The insane colony, here, I believe to be, for the present, essentially an impracticability, and hence discard it from further notice.

At this point, if you will pardon me for quoting from myself, I desire to introduce an opinion published in 1852, after an examination of German hospitals, and a perusal of much that had been written in the Germanic countries, upon the question of separation of the incurable from the curable insane. That opinion is as follows: "It appears to me that the true method to be pursued in regard to lunatic asylums, is this: let no institution have more than two hundred patients, and let all receive both curables and incurables, in the natural proportion in which applications are made for the admission of the two classes, from the respective districts in which these institutions are located."

The only modification to this plan which I would now make, is, an extension of the limits of the number of patients to two hundred and fifty; and this is permissible only because of the large proportion of incurables among the existing insane.

So far as relates to character and extent, hospitals of this description are model institutions. The plan appears to me the best of all plans. In no other way can the insane be so well and so effectively treated, their protection secured, their comfort assured, their general welfare promoted, their contentment approximated, and the greatest probability of their restoration attained. The superintendent can obtain a sufficiently thorough knowledge of the case of every patient. Inspection by him may be frequent. All the details of treatment, both medical and moral, may be known to him, and hence the greatest efficiency secured. All the labor of which the patients are capable may be obtained as easily as under any other plan, and a large part of it may be devoted to the care of the curables, the sick, and the excited thus materially diminishing the necessity for paid employés.

Any desertion of this plan of treating the insane appears to me to be a desertion of the principles of true Christian philanthropy and beneficence. There can be but one excuse for such abandonment, and that is, pecuniary expense, the rude touchstone to the severe test of which all schemes of benevolence and of human improvement are brought. Under one roof, and with one household organization, five hundred persons can be supported at a cheaper rate, per capita, than two hundred and fifty persons;—and hence five hundred it must be. This is the first departure from the true method, and this departure has already very generally been made in this country. "It is the first step that

costs." The next step in the same direction naturally follows. The chronic and the incurable insane can be maintained at a less expense than is required for the best treatment of curables. Hence the two classes must be separated. So saith cold calculation.

The brief limit of time forbids any further development of the objections to separate establishments for incurables, further than to ask if we may not learn something from the Germans, who, after the subject had been subjected to exhaustive discussion, came to the practical result of constructing nearly all of their largest and most recently erected institutions, upon the plan of treatment of both classes under one roof, although the two are in separate departments.

Believing the true colony not only open to serious objections but as infeasible at present; regarding the institution of distinct asylums for the incurable as detrimental to the interests of the insane, for reasons already given, as well as for the very great doubt that the two classes can be properly cared for more cheaply separate than together; recognizing, with sincere regret, the fact that the plan of small hospitals has been practically relinquished, and yielding to that result, only because the power which produced it is so strong as to bid defiance to any available resistance, I approve of large hospitals, those which accommodate from three hundred to five hundred patients, as the best practicable plan for the care of all the insane who must be congregated. This plan I would pursue so long as the number of incurables is not very largely disproportionate to that of curables. When, however, the former greatly preponderate in numbers over the latter, rather than widely to separate the two classes I would adopt that style of institution which unites the characteristics of both the hospital and the colony. The principal building should

be a hospital commensurate in its perfection with the knowledge of the time. The other buildings for patients should not be far remote; neither should they be so large as those at Clermont. The dimensions, the internal arrangement, and the furniture should be adapted, in each instance, to the condition and the circumstances of the patients for whom the edifice is intended.

The facilities for a transfer of patients from one building to another, according to their variations of condition, are of very great importance as a recommendation of this form of institution. This advantage alone should forever forbid the thought of isolated asylums for the incurable.

If, then, it should become necessary for the commonwealth of Massachusetts to enlarge her provisions for the insane, the object may easily be attained—and the experiment is not unworthy of a trial—by the erection of minor buildings upon the farm of one of the existing State hospitals.

GLANCE AT INSANITY

AND

THE MANAGEMENT OF THE INSANE IN THE AMERICAN STATES.

BY

PLINY EARLE, M.D.

READ BEFORE THE CONFERENCE OF CHARITIES, HELD AT CHICAGO, ILL., JUNE 10, 1879.

BOSTON:

FRANKLIN PRESS: RAND, AVERY, & CO. 1879.

A GLANCE AT INSANITY

AND THE MANAGEMENT OF THE INSANE IN THE AMERICAN STATES.

BY PLINY EARLE, M.D.

In coming before you, pursuant to the appointment for the honor of which I am indebted to the Conference of Charities of 1878, I make no pretension of attempting to present for your consideration any thing new from that special field of labor in which I am employed, a comparatively small, although far from being an unimportant part of the broad domain which legitimately comes within the purview of the association here assembled.

It is proposed to occupy your attention with a very brief consideration of the general subject of insanity in the United States, contemplated as historical, contemporaneous, and prospective; to lay before you the skeleton of an argument by which, through the experience of the past, and a just comprehension of the present, the subject may be placed in such a light as to render more easy the selection of proper methods of meeting the grave responsibilities of the future.

Fifty years ago, in 1829, there were within the limits of the United States but eight institutions specially devoted to the care and the curative treatment of the insane. Only four of them were State institutions; and two of these had been in operation but a few months, since both of them were first opened in the next preceding year. At about this time the people of the States began, more generally than theretofore, to take an interest in the subject of insanity, to recognize the fact of the measurable curability of the disease, to direct their attention to the condition of the insane, to perceive the inadequacy of provision for their suitable accommodation and treatment, and to discuss the importance of these questions in relation not alone to humanity, but

also to the social compact and the governmental autonomy of the State.

The State hospital at Worcester, Mass., went into operation in 1833; and of all the institutions of the kind within the United States, the opening of which was within the half-century preceding the present year, it is the oldest. The time at which it began its work forms an important epoch in the history of the enterprise for the amelioration of the condition of the insane. Its superintendent, Dr. Woodward, was an enthusiast in the specialty; and although perhaps not more devoted than Dr. Wyman of the McLean Asylum, or Dr. Todd of the Hartford Retreat, he gave to the profession and to the world, by his detailed reports, vastly more than they of the results of his observation and practical experience. This information was widely disseminated, and gave to the popular movement in favor of the insane an impulse such as it had never before received, and the importance of the consequences of which, extending as they do to the present day, and as they will through all the future history of our nation, cannot now be estimated.

At a period not much later, Miss Dix began that long and laborious career of philanthropic devotion to the interests of the insane with which her name is indissolubly connected, and to which the annals of all history furnish no parallel. To those two persons, Dr. Woodward and Miss Dix, more than to any other two, are the insane of our country indebted for the awakened interest of the people in their behalf, and consequently for that rapidity of practical action, manifested in the erection of asylums and hospitals for their benefit, which has in no other country been exceeded, even if it have been equalled.

In the course of the seven years from 1834 to 1840, both inclusive, no less than eight asylums and hospitals were opened for the reception of patients, thus doubling the number within the jurisdiction of the States, antecedent to the hospital at Worcester. Five of the new ones were founded by the States within which they are respectively situated. In the decennium from 1841 to 1850, inclusive, the number of institutions completed and put into operation was nine, of which six were founded by States; and in that from 1851 to 1860 it was no less than twenty, of which fifteen owe their origin to commonwealth provision. The remarkable increase during the decade last mentioned happily illustrates not alone the cumulative influence of agencies already mentioned, but

of others which had been brought to bear upon the philanthropic enterprise. Not the least among the latter was the formation of the Association of Medical Superintendents of American Institutions for the Insane, an organization which, although sometimes accused of a persistent adherence to the methods of the past, uninfluenced by the results of experience, has nevertheless been a potent instrumentality for good.

The late civil war was, naturally and necessarily, a serious check to the multiplication of curative and custodial institutions, and measurably so to all the activities engaged in the beneficent undertaking for the attainment of the ends of which those establishments are the most important practical agents. Yet, notwithstanding this, the area of the enterprise has continued to expand, and the number of hospitals to augment until, at the present time, we have within our national borders not far from eighty,—a tenfold increase during the lapse of half a century.

Of all those fifty years, the decennium from about 1837 to 1847 was, relatively, more important than any other period of equal length, in respect to the adoption of principles, the introduction of innovations, the establishment of methods, and the general shaping of the then future course of the enterprise. period has been more remarkable for the enthusiasm of the professional men engaged therein, and none more prominent for the intellectual ability of those men. Doctors Woodward, Bell, Awl, Butler, Brigham, Kirkbride, Stribling, Ray, and McFarland - I mention them very nearly if not precisely in the chronological order of their entrance into the specialty - were in active service each during a part of that decennium, and, at one period, all of them simultaneously. Such a body of men, acting at a time in which the enterprise for the insane was in its most plastic and impressionable stage, could not fail to leave upon it the lasting evidences of their ability.

But the imperfection, and consequently the fallibility, of human nature are such that the conduct of an enterprise, even though it be for charitable purposes, can no more be wholly free from mistakes than can the conduct of each individual life. And thus it happened, that, in the early history of our specialty in this country, the zeal and the rivalry of those by whom it was prosecuted gave to the public mind a false impression, from which sprang hopes and expectations that could never be fulfilled.

As early as 1827, by a combination of fortuitous and favorable

circumstances, Dr. Todd, of the Hartford Retreat, was able to report the recovery of twenty-one out of twenty-three recent cases of insanity received into that institution. This remarkable result was reduced to a formula; and the percentage (92.3) thus derived from less than one quarter of a hundred of cases was published, and became more or less a criterion by which to measure the possibilities in all recent cases.

Dr. Woodward, at Worcester, adopted the fallacious method of calculating the proportion of recoveries upon the number of patients discharged, instead of upon that of the number admitted, and in this way had succeeded in reporting a percentage of 841 in 1836. Early in the following year Dr. Bell took charge of the McLean Asylum, and Greek met Greek upon the arena of the professional specialty. The decennium last noticed was soon entered upon, and the several superintendents above mentioned came successively into the lists. Before each of them stood the stimulating, the provocative precedent, of erroneous percentages; and around each of them was the competitive ability of his colleagues in the specialty. It is no cause for marvel, that, under these circumstances, a public opinion was formed upon the curability of insanity, too favorable to be sustained by the experience of the This opinion was enunciated by a few superintendents at an earlier date; but, considered as an established idea in the minds of the people, it was the fruitage of the decennium in question, more than of any other in the whole history of the past; and thenceforward it has very generally been claimed, that, of all cases of insanity of less duration than one year, from seventy-five to ninety per cent are susceptible of cure. For more than forty years in respect to a few, and more than thirty years in respect to many, this has been the shibboleth of the superintendents of the hospitals, and of other writers upon the subject of mental alienation; and especially has it been depended upon as one of the crowning arguments in favor of the establishment of new hospitals and the enlargement of old ones, and of appeals to hesitating and reluctant legislatures for additional appropriations of money for the completion of unfinished ones, for which the purse of the commonwealth had already been taxed beyond the bounds of reason and of patient endurance.

But recent investigations have demonstrated the fallacy of the claim to a degree of curability so extensive. The experience of the hospitals during the last forty years has given to the statisti-

cian the results of a number of cases sufficiently large to form a basis of somewhat reliable general conclusions. In no single instance of the treatment of a thousand recent cases, has the recovery of even sixty-six per cent been reported. And in the most valuable and reliable statistics upon the subject, even the proportion reported was attained, in large measure, by the repeated recoveries of a few individuals from a multiplicity of attacks. The deceptive nature of the word cases was thus exposed. superintendents reported the recovery of cases. The unprofessional readers of the reports, thoughtless of the technical use of the word, believed that case is equivalent to person, and, consequently, that the number of cases represented an equal number of persons. When the Bloomingdale Asylum reported, without explanation, six recoveries in one year, all of which were furnished by one woman, who was again brought to the asylum before that report was in print, and who finally died there, the public necessarily inferred that six different persons had recovered; and the same is true as applicable to the Worcester Hospital, when it reported, without explanation, seven recoveries in one year, of a woman whom it had reported as recovered no less than nine times in the course of the next preceding two years, - making sixteen recoveries in three years.

In order to impress the mind with an accurate estimate of the recoveries as annually reported at the hospitals, without analyzation or explanation, permit me to adduce a few further facts.

At the Northampton (Mass.) Hospital, five persons have recovered thirty-three times, an average of more than six recoveries to each.

At the Worcester (Mass.) Hospital, one woman (the one above mentioned) was discharged recovered twenty-two times.

At the Bloomingdale Asylum, New York, prior to 1845, a woman was admitted twenty-two times, and discharged recovered every time; and for another woman (the one who recovered six times in one year) forty-six recoveries were reported in the course of her life, and she died upon her fifty-ninth admission; and those forty-six recoveries are to this day published, unexplained, in the tables of the reports of that institution, as available material for all persons who wish to demonstrate, by the absolute infallibility of mathematical figures, which "cannot lie," the proportion of persons attacked with insanity who are again restored, by recovery, to health and to usefulness. When the Bloomingdale Asylum

had been in operation fifty years, it had treated 6,325 patients, and the whole number of recoveries was 2,796. This one woman furnished 1.66 per cent, or one sixtieth part, of all these recoveries.

At the Frankford Asylum, Pennsylvania, the aggregate of the recoveries of five persons was fifty-two, or more than ten recoveries to each person; and yet no less than three of those persons subsequently died in the asylum.

At the Worcester Hospital, in 1877, seven women had recovered ninety-two times, an average of more than thirteen recoveries to each; but nevertheless two of those women had died insane in that hospital; two of them were then present in the hospital, both of them insane, and one of them hopelessly so; and one was in another hospital, hopelessly insane. How admirably might those same ninety-two recoveries be used "to point a moral, or adorn a tale"!

At the Vermont Asylum, the report for 1878 says, "Of the number discharged, fifty-two recovered." Had the reporter stopped there, according to the invariable custom at that asylum for at least forty years, the unenlightened reader might reasonably have inferred that that number of persons, afflicted with insanity for the first time, had been sent to their homes and firesides permanently cured. But the reporter proceeds: "Twenty-eight recovered from a first attack, nine from a second, three from a third, four from a fourth, two from a fifth, two from a sixth, one from a seventh, one from a tenth, one from a fourteenth, and one from a fifteenth."

How wonderfully a little explanation may sometimes alter appearances! Twenty-four of those persons, instead of being permanently cured from a first attack, have already had an aggregate of one hundred and eleven recoveries; and, judging of their future by their past, many more similar recoveries are in store for them — and for the statistics of insanity.

At the New Hampshire Asylum, in the course of the official year ending April 30, 1878, there were thirty-five recoveries. Only fifteen of them were from the first attack. Of the other twenty patients, seven recovered for the second time, seven for the third time, two for the fourth time, one for the fifth time, one for the seventh time, one for the tenth time, and one for the thirty-fifth time. The twenty persons have furnished one hundred recoveries, to say nothing of what they will furnish hereafter. In the thirty-six years since the asylum was opened, the whole number of

recoveries of its patients is 1,526. These twenty persons have supplied one hundred, or 6.81 per cent, of all those recoveries; and yet it is improbable that either one of them is permanently cured.

If we consider that these are the multiplicate recoveries of the patients discharged in only one year, and remember that every year will furnish its quota of them, we may measurably conceive how very large a proportion of the whole 1,526 recoveries, since the hospital was opened, are of the same delusive character, — mere repetitions of the temporary recoveries of a comparatively small number of persons.

By such deceptive statistics as these, more or less of which are found in the reports of all institutions for the insane that have been in operation two or three years, the public mind has been seriously led astray. . And it will continue to be thus more or less deluded, until all the superintendents shall conclude to follow the example of the few who, by such explanations as are given above, convey to the reader a clear understanding of the nature of the recoveries. The old way, still followed by the majority, savors too much of the ad captandum methods of a still grosser character, pursued to some extent in years gone by, by which the statistics were presented in such form, that, in the words of Dr. Bates, they were "received with wondrous admiration by that portion of the public who are better pleased with marvellous fiction than with homely truth;" and it tends to sustain and demonstrate the justice of the remark of the late Sir James Coxe, when he wrote of "that spirit of inflation which is a too prevalent characteristic of writers on this branch of medicine."

Of 1,061 cases of recent insanity treated at the Frankford (Penn.) Asylum, the proportion of recoveries was 65.69 per cent. But, by an analysis of these cases, it has been shown that the recoveries of persons were only 58.35 per cent; and that, of those that recovered, there were so many relapses that the permanent recoveries were but 48.39 per cent. Had it been pos-

¹ Since this paper was read before the Conference, I have received the report of the New Hampshire Asylum for the official year ending April 30, 1879. The recoveries at that institution, in the course of the year, were twenty-seven; but only eleven of them were from the first attack. Of the remaining sixteen patients, four recovered for the second time, eight for the third time, one for the fifth time, one for the ninth time, one for the tenth time, and one for the thirty-sixth time. The sixteen persons have contributed ninety-two recoveries to the statistics of insanity.

sible to trace all the persons, and obtain their history, it is not at all improbable—it is, indeed, only too probable—that the number of permanent recoveries would have been reduced to forty per cent. These are the most reliable of all American statistics in regard to the results of treatment of so-called recent cases.

Of the true results of treatment of all the *persons* received into institutions, irrespective of the duration of the disease, the most valuable statistics are those for which we are indebted to Dr. Arthur Mitchell of Edinburgh, and the late Dr. John Thurnam, for many years superintendent of the Wiltshire Asylum at Devizes, England.

Dr. Mitchell informs us that, in the year 1858, 1,297 persons were admitted, for the first time, into the asylums in Scotland. Twelve years afterwards, in 1870, the intermediate history of 1,096 of them was ascertained. Of those 1,096, no less than 454 had died insane, and 367 still lived insane; total, 821, or 74.91 per cent insane. And 78 had died not insane, and 197 still lived not insane; total not insane, 275, or 25.09 per cent. In general terms, three-fourths were insane, and one-fourth not insane.

Dr. Thurnam, having obtained the history until death of 244 persons admitted into the Retreat at York, deduced from the results the following general formula: "In round numbers, then, of ten persons attacked by insanity, five recover, and five die sooner or later during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die."

This formula, and the statistics from which it was derived, were published some thirty years ago; but in this country nearly all of the writers upon insanity have shunned them as if they were the fructified germs of pestilence.

Another mistake, or, more properly, a blunder,—a species of error condemned by politicians as more censurable than crime,—has been made in the enterprise for the treatment of the insane. From the initiation of that enterprise, the great ultimate object has been to provide, for all the insane requiring humane guardianship, adequate accommodations in either hospitals, asylums, or other places where such oversight and direction would assuredly be rendered. It was for a long time hoped to accomplish this object by well-equipped hospitals alone; and this hope was en-

couraged, and perhaps stimulated into expectation, by the constant iteration and reiteration of the assertion of the eminent curability of the disease. If ninety, or eighty, or even seventy-five, of each hundred of insane persons could be permanently cured,—and such was the impression given,—public benevolence would certainly properly provide for the comparatively small remainder, the more certainly so because it could be done at trifling expense. For these reasons the establishment of curative institutions, and curative institutions alone, was almost universally advocated, not merely by the medical superintendents, but by other interested persons as well. In these establishments the curable could be cured, and the incurable domiciled for life.

Then arose the not illogical argument, "The better the hospital, the greater will be the number of persons cured." But most unfortunately, not for the enterprise alone, but for the treasuries of States and the purses of the payers of taxes, the word better" in this proposition was in some places practically interpreted "more costly." Under this rendering, the ambition of architects, the pride of commissioners and superintendents, and the universal extravagance of the people during the years next following the close of the late civil war, strongly fortified and assisted this argument; and the practical consequences are now apparent in that class of hospitals—professedly charitable institutions—which have cost from twenty-five hundred to four, or perhaps five, thousand dollars for every patient to whom they can offer a comfortable domicile.

As a direct consequence of the mistake and the blunder which have just been passed under review, the State of Massachusetts has recently opened, at Danvers, a hospital the cost of which, in appropriations and interest upon those appropriations, was, at the date of its opening, very nearly eighteen hundred thousand dollars; and yet that hospital, unless crowded beyond the number of patients for which it was designed, cannot accommodate the actual increase of patients within the State during the time occupied in its construction. Hence, notwithstanding eminent authorities have asserted, and other authorities have repeated it to the echo, that from seventy-five to ninety per cent of the insane are curable, yet during the last few years it has cost the Commonwealth of Massachusetts a thousand dollars a day, sabbaths included, to supply the shelter of a hospital (to say nothing of support) to the mere current increase in the numbers of its insane; and this cumulative

cost will continue so long as she continues the construction of hospitals requiring an expenditure so exorbitant. It is submitted that no nation or state ever has been able to afford, and that no one ever will be able to afford, such expenditure for public charity from the public treasury until that millennial day in which all the ordinary laws of industry and trade, and all the present principles of the true philosophy of practical human life, shall have been changed. The wealthy may, and can, bear it; but its burden weighs grievously and oppressively upon thousands and tens of thousands in the humbler spheres of society. The life's blood of many is drawn, under the forms of law, in providing an ostentatious charity for a few, as "millions died that Cæsar might be great."

The scientist, the political economist, the statesman, the philosopher, or the moralist, who recalls the comfortable simplicity in which, forty-five years ago, Drs. Wyman and Todd and Woodward lived amid the scenes of their labors, and who now beholds the contrast presented at some of the more modern institutions, and remembers that during the intervening period the average proportion of reported recoveries at the hospitals has diminished not far from twenty-five per cent, will not long hesitate in his decision whether the greater progress has been made in the direction of the perfection of science, or in that of the luxurious display which, in olden times, was a precursor of the decay and the downfall of the Roman Empire.

Such is a cursory view of the past. We come now to the absolute present. At this moment, pregnant with the problems of the future, what is the knowledge hitherto gained from experience?

We have learned, firstly, foremostly, and most importantly, that, if reference be had to persons rather than to cases, — and in the relations in respect to which the subject is here discussed such reference is the only one of importance, — the proportion of recoveries from insanity is only about one-half as great as was formerly assumed as possible, and was hoped to be attained.

We have learned, that notwithstanding the general improvement of the institutions in the course of the last fifty years, and the very lavish outlay of money upon some of those most recently established, ostensibly in the hope of increasing the proportion of recoveries, yet, with reference to all the cases admitted into those institutions, that proportion has not been increased, but has actually diminished.

We have hence learned one important reason—perhaps the most important of all—for the unintermitted and remarkable increase of insane persons among the people, in spite of the constant accumulation of hospitals,—a fact which has been regarded by many as a marvel, if not a paradox.

We have likewise learned that this continual augmentation cannot be arrested by the ordinary human instrumentalities. It has become an established fact, and must, apparently, be perpetual, unless the occult natural causes of the disease shall cease to operate, or shall become essentially modified, or unless the human race attains a degree of wisdom and of self-abnegation not hitherto reached, and abstains from or avoids those causes which are known and avoidable.

As, then, we look abroad over our country to-day, we perceive that notwithstanding the existence of about eighty public institutions, as well as a considerable number of private establishments for the treatment of the insane, and nearly all of them crowded beyond their capacity healthfully to accommodate, yet the number of insane persons unprovided with such protection and care is probably very nearly as large as at any former time. Thousands are with their families or guardians, other thousands are in almshouses, some are in prison, and some are vagrants. who, in a large proportion of the States, have opened their hearts and their purses with unstinted benevolence and liberality in aid of this unfortunate class, are in some places impatiently suffering under the conviction that their charity has been followed by no adequate return, and their generosity abused by that spirit of extravagance which has brought forth hospitals, the construction of which was apparently directed to a greater extent by human pride than by simple love of fellow-men. Men's minds are unsettled. The question of the best system of managing the insane is, as a broad and general proposition, far more emphatically an unsolved problem than it was thought to be forty years ago. Then it was apparently solved simply by the construction of hospitals: now it has become a mystery by the inadequacy of hospitals to accomplish the desired end. Statesmen, philanthropists, humanitarians, are to some extent adopting different methods in different States, all of them seeking a general scheme by the kindly operation of which every insane person requiring curative treatment, parental care, or custodial restraint, shall be suitably provided for, in such places and in such manner as will

be effective, without transcending the true pecuniary ability of the people.

Standing, then, as we now are, upon the threshold of the future, what, so far as we are enabled to prognosticate, is to be the system of managing the insane in the undeveloped years before It is not improbable that some persons in this assembly are expecting that the committee which I have the honor to represent will, at the present time, answer that question by a plan of the machinery of such a system, so well digested, so matured, and so nearly perfect, that it may immediately be adopted by the States respectively. If such expectants there be, they will be disappointed. Their expectation denotes an enthusiasm based upon feelings too sanguine for the slothful pace of practical progress, in a scheme of such magnitude as the one in question. in social science are mostly the developments of centuries, not the mushroom outgrowths of a night. It is impossible, at this time, to unify or to harmonize the diversity of opinion upon this subject sufficiently to adopt any system, how wisely soever it might be planned.

One thing, however, may be regarded as settled: The Hospital for the Insane is an established fact, a permanent necessity. The curative institution, furnished with all the munitions appropriate to the attainment of its ultimate object, cannot be dispensed with. It is alike the demand of humanity, of social and political economy, and of wise and prudent statesmanship. It has come. It must remain. This granted, what shall be its dimensions? Unquestionably, other things being equal, that hospital is the best, the limits of which are so restricted as to enable the superintendent or physician in chief fully to understand the history and the current therapeutics of the disease of every patient. If, then, from one-third to one-half of the patients are curable, as was true of some, if not most, of the hospitals forty years ago, the whole number of patients should be limited to from two hundred and fifty to three hundred.

Shall the hospital, whether large or small, be of a definitely prescribed and unchangeable architectural design, either of ground-plan or internal arrangement? To this query it may be replied, that, in the construction of a curative institution of this kind, two general principles should constantly be kept in view. Not for a moment should they be forgotten or overlooked. These are, first, perfection of hygienic conditions, and, secondly, convenience and

a judicious economy of daily practical working. These principles adhered to, why should the hospital, any more necessarily than the dwelling-house, be constructed upon an invariable model? Climates are not alike, customs and habits differ, and, fortunately, there is no uniformity of tastes. Wherefore should not the hospital, as well as nearly every thing else, be permitted to conform to this great diversity of circumstances and conditions? With no sacrifice of the principles above mentioned, the monotonous rigidity of the rectilineal corridor of the old hospital has been destroyed, and a more tasteful, agreeable, and homelike arrangement been substituted in England, and more recently in New England, by Dr. Eastman, at the new hospital in Worcester, and by Dr. Bancroft, in the additions to the institution at Concord.

The force of circumstances, the stern and inflexible logic of events, has, in most of the States, compelled the abandonment of the long-indulged hope of placing all the insane in those amplyequipped institutions which deserve the title, hospital. Twentyfive years ago no human prescience could foresee the mass of chronic insanity with which the States are already burdened, much less that greater accumulation which, as we now have good reason to believe, awaits them in the future. If, then, the asylum for the chronic insane, so long denounced in theory, must be admitted as a practical necessity, it happily may now be so admitted unaccompanied by that which was the greatest objection formerly alleged against it, — the danger of imperfect oversight and inspection. accepting the asylum, we demand that it shall be completely officered, and under governmental surveillance. These conditions will doubtless be granted. New York has already established a large one at Willard, and Massachusetts has a smaller one at Worcester; both of them placed, in those respects, essentially upon the same plane as the hospitals.

We have now reached another form of institution, which I shall venture to regard as an established fact for the future. The Willard Asylum, just mentioned, an establishment founded and fostered by the State, has, under the able management of Dr. John B. Chapin and an energetic board of trustees, made its way, through many difficulties, to a position of entire success. This institution is a happy union of the hospital and the asylum. It in a great measure preserves the advantages of the small institution with the alleged economy of support of the large one. It insures that constant official supervision of the chronic insane which pre-

vents deterioration and abuse; and at the same time its central hospital furnishes all the effective curative advantages of those institutions which have been erected at a vastly larger cost. It is believed to be the true policy of all the larger States, as the demand for further accommodation increases, to group around one or more of their present hospitals buildings of comparatively cheap construction, similar to those at Willard, rather than to enlarge the number of their institutions with more costly edifices. Illinois, as I understand, proposes to construct the new institution at Kankakee upon this plan; and the Boards of State Charities in New York and Ohio, as well as a specially-appointed commission in Connecticut, have recommended the same for adoption in those States respectively.

It is greatly to be desired that the accumulation of the insane in public institutions should be restricted as far as possible, consistently with the spirit of the principles upon which those institutions The best interests of the patient, on the one hand, and the protection of society from harm, on the other, are the only legitimate rules for guidance in this matter. But many patients are now committed to those establishments from whom society has nothing to fear, and whose best interests are promoted by such Hence it is a action simply because they have no suitable home. cherished idea with some philanthropists, that homes among the people may and should be found for them, thus preserving to as many as possible the inestimable privilege of life in the family. Based upon this idea are the mediæval colony of the insane at Gheel, in Belgium, and the comparatively recently adopted practice in Scotland, of placing incurables, not to exceed four in any family, as boarders in the villages of the rural districts. But a colony like that of Gheel is believed to be an impossibility in this country, in consequence of the habits, the customs, in short, it may be said, the genius, of our people. Nor has the experiment in Scotland hitherto proved so successful as to offer much encouragement for a repetition of it in the United States. No efforts to extend the practice have recently been made in that country; and at Kennoway, one among the first of the villages selected for the experiment, the people have become so much dissatisfied that they have petitioned that the patients there domiciled be removed to the public asylums.

With all possible charity for human nature, it must still be acknowledged, that, as a rule, the dominant motive for the recep-

tion of an insane person, and that person a stranger, into the family as a boarder, would be the desire of pecuniary gain. It would be a strictly business operation, in which, primarily at least, neither philanthropy nor benevolence could be expected to any considerable extent to enter. This fact alone is sufficient to show that, if the method were adopted here, the patients must be constantly kept under the watchful surveillance of the State. Considered in regard to this question, the chronic insane may be divided into three classes:—

1st, The able-bodied men and women, in robust or fair health, who are willing to work.

2d, The quiet and harmless idiots and imbeciles, whose physical health is good, whose habits are cleanly, and who require comparatively little care.

3d, The imbeciles and the demented, of shattered constitutions and feeble health, of vicious habits, depraved appetites, and mischievous and sometimes dangerous propensities.

Of these three classes, provision in private families might more easily be obtained for the first than for either of the others. But in a public institution the work performed by a large part of these patients is equivalent to the cost of their support. If the State supports them, it is properly entitled to their labor. All those who could safely be placed in families can be intrusted, at the hospital or the asylum, with the liberty of the premises, and thus be made as comfortable and as contented as in the private family. Hence more is lost than gained by placing these patients out as boarders.

For the members of the second class it would be more difficult to find positions; and if found it is improbable that, including the expense of governmental supervision, they could be supported as economically as at an institution like the Willard Asylum. Consequently nothing is gained here, because the persons in question are incapable of appreciating the difference between the family and the asylum.

The members of the third class are not proper subjects to be placed in private dwellings.

While, therefore, to us the prospect of essentially diminishing the number of the insane in hospitals and asylums by distributing them among the people is not encouraging, let it be understood that we perceive no serious objection to a trial of the experiment. Success sometimes awaits the efforts of that enthusiasm which is inspired by faith, even when the doubters least expect it. Dr. Bancroft has suggested a method of distribution in families, which, in our estimation, presents a more favorable prospect of good results than the one just mentioned. He proposes that a series of dwellings upon the outskirts of the farm of a hospital or an asylum, or in the vicinity thereof, shall be placed each under the direction of a suitable farmer or other person, subject to the direction, or at least the oversight, of the superintendent of the institution; that patients, in such numbers as may be found best, shall here be domiciled, they and the directors of the house working upon the farm of the institution, or, if desirable, at other places. This method is a modification of the cottage plan; and the most important apparent objection to it is that the cost of support would probably be more than in an asylum like that at Willard.

In years gone by, some of the superintendents of hospitals in this country have recommended special institutions for epileptics, and others have objected to them. In some of the British asylums the patients of this class have for some years been domiciled in a department by themselves. The peculiarities and requirements of epileptics are such as to characterize them as a distinct class, for the care of whom a properly-adapted building would be eminently appropriate; and the great annoyance to other patients, arising from the paroxysms of their disease and from the excessively violent outbursts of maniacal excitement to which many of them are subject, furnishes a strongly fortifying argument in favor of such provision. The movement in Ohio for ascertaining the number, the situation, and the condition of the epileptics of that State, is one that may well be followed in the other States. And as one of the immediate results of the investigation in Ohio was a recommendation by the Board of Public Charities of that State, that those epileptics be collected in a specially-adapted State institution, it is to be hoped that a similar result would obtain in the other States. If, in the smaller States, the number of these afflicted ones be insufficient to justify the construction of a separate institution, they could be cared for in separate departments of existing hospitals.

Such, it is to be hoped, will be a part of the established policy of the future.

We should come short of our duty if, on the present occasion, we should fail to call attention to an apparently gross inconsistency in the prevailing method of conducting the enterprise of benevolent oversight of the insane. In some of the States where the govern-

ment of the commonwealth assumes a supervisory authority over all the institutions specially devoted to the insane, whether those institutions be corporate, private, or the property of the State, there is an utter failure even to recognize county, city, and township almshouses, in which large numbers of the insane are supported. The Argus-eyed watchfulness over the hospitals is offset by a mole-eyed disregard of a class of establishments which, to say the least, have not heretofore proved themselves especially worthy of confidence. The apparently exalted sympathy of the people, which surrounds the lunatic as with a protective atmosphere so long as he is in an institution fortified with safeguards against evil practices, deserts him the moment he enters the almshouse, in which those safeguards are comparatively few. As before intimated, the facts betray a most marvellous inconsistency, and would seem to throw a serious shadow of doubt upon the sincerity of that sympathy which, in various ways, blazons itself before the people whenever the public hospitals are in question. This glaring defect in the general supervision of the insane ought immediately to be corrected.

In conclusion, it may be remarked, that while it is impossible, at present, so far to assimilate opinions as to adopt any prescribed system of managing the insane, we look cheerfully forward to the improvements of the future. Experiments in diverse methods will be made in the time to come, as they have been made in the past. We may confidently anticipate for these the survival of the fittest; and he must be strangely wedded to his own opinions who would not acknowledge a readiness to approve whatever has been demonstrated by experience to be the best.

THE

CURABILITY OF INSANITY.

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READ BEFORE THE NEW ENGLAND PSYCHOLOGICAL SOCIETY, ON RETIRING FROM OFFICE AS ITS PRESIDENT, DECEMBER 14, 1876; AND PUBLISHED BY THAT SOCIETY.

UTICA, N. Y.

ELLIS H. ROBERTS & Co., PRINTERS, 60 GENESEE STERET. 1877.

THE CURABILITY OF INSANITY.

Within the last few years, calculations have been made, in more than one of the States, for the purpose of showing the pecuniary loss that has accrued to those States, respectively, from a failure to cure that portion of their dependent insane assumed to have been curable in the early stages of the disease. In one of those States, Pennsylvania, the calculation was made by the Board of Public Charities, and is based upon the estimated number that became insane in the decennium from 1864 to 1873, inclusive. The author of it assumes. upon what he considers unquestionable authority, that seventy-five per cent. of them, if properly and seasonably treated, might have been permanently restored to health and usefulness. Had this been done, the total cost of treatment, together with the support, for life, of the twenty-five per cent. uncured, would, according to his estimate, have been only \$6,540,066. On the contrary, had all these patients been placed in poor-houses, where it is assumed that seven per cent. of them would recover, the cost of support, during life, would have been \$11,272,982. "This," says the writer, "shows a clear saving of \$4,731,866." He then proceeds to show that, if the seventy-five per cent. had been cured, their earnings would have amounted to \$4,945,000 more than they would if only seven per cent. had been cured. Adding these sums he obtains a total of \$9,676,866, "a gain," he says, "of that much to the wealth and power of the community." Having completed the calculation, he says, "we urge a very careful attention to, and also criticism of the above demonstration."

But a few months have elapsed since, in an official report of the Commissioner of Insanity in Vermont, it was alleged, as a condemnatory fact against the hospital for the insane of that State, that the proportion of recoveries among the patients has recently been less than it was in the earlier history of that institution. In view of the two main propositions of the foregoing paragraphs, it has appeared to me that a review of the subject of the curability of insanity might not be wholly useless at the present time.

The "demonstration," a criticism of which is invited by the Board of Public Charities of Pennsylvania, will not suffer, as an intellectual process, either in its logic or its mathematics, from the closest scrutiny. The serious question in regard to it is, are the elements of the calculation true? If either of them be false the deduction from them can not be otherwise than untrue. Although not directly so stated, it is evident that the seventy-five per cent. of assumed curables relates to persons, and not to cases; that is, that the author of the "demonstration" believed, or appears to have believed, that three-fourths of all the men and women who become insane, can be permanently cured. The truth of this assumption is necessary to the truth of the deduction at which he arrives.

The belief that mental disorders are thus largely curable is not entertained by the Board of Public Charities of Pennsylvania alone. It has become pretty widely prevalent among persons interested in the subject of insanity, but not, themselves, engaged in the treatment of the insane. Some of these persons entertain the opinion that even a still larger proportion are susceptible of cure. It is one of the objects of this paper to ascertain, if possible, whether this belief, or opinion, is justified by the facts.

As an almost, if not entirely, universal rule, the superintendents of the institutions for the insane report the recoveries of cases rather than of persons. A person may be admitted more than once into a hospital, and hence make as many cases as the number of his admissions. As a case he may recover several times; and not only so, but after several recoveries, he may still die insane. His history then furnishes to the statistics of insanity several recoveries of cases but not one permanent recovery of a person. Thus, at the State Hospital at Northampton, a man was discharged, recovered, seven times, and improved, once, in the course of nine years; and subsequently committed suicide at home. Another man has been discharged, recovered, six times, on the same number of admissions, in the course of fifteen years. One woman was discharged, recovered, eight times on as many admissions, in the course of eleven years. Another, admitted six times in the course of nine years, was discharged recovered every time; and a third, admitted six times within a period of eight years, was likewise discharged, recovered, every time. These five persons have, as cases, recovered thirty-three times, and yet it is not probable that either of the persons has permanently recovered.

Every institution for the insane has its cases of this kind, and, as a rule, the older the institution the more it has of them, and the larger is the number of times that each of them has been discharged recovered. The most remarkable instance of the kind which has come to my knowledge, occurred at the Bloomingdale Asylum, New York, where a woman was admitted fiftynine times, in the course of twenty-nine years, and was discharged, recovered, forty-six times.

Dr. Joshua H. Worthington, Superintendent of the Friends' Asylum at Frankford, Pennsylvania, informs me that eighty-seven persons have contributed two

hundred and seventy-four recoveries to the statistics of that institution, an average of a fraction more than three to each person. One patient recovered fifteen times; another thirteen; a third nine; a fourth eight; and a fifth seven. Those statistics are indebted to those five persons for fifty-two recoveries, or an average of ten to each person. So, while the uninformed reader believes that fifty-two persons recovered, the truth of the matter is, that no less than three of the persons died insane in the asylum, and consequently the cures, if any, could not, at most, have been but two.

The report for the official year 1867-68, of the Retreat, at Hartford, Connecticut, contains a table by which it is shown that of the four thousand eight hundred and ninety-eight cases admitted, thitherto, into that institution, only three thousand and sixty-two were of first admission. In other words, there were but three thousand and sixty-two persons. Seven hundred and seven of these were readmitted once or more, making a total of one thousand eight hundred and thirty-six Hence, of each hundred of patients readmissions. received, thirty-seven (37.48) had been there before. One person was admitted thirteen times, and thirteen persons were admitted a total of one hundred and eight How many of those one hundred and eight times the thirteen persons were discharged recovered, the report does not inform us; but we may reasonably conclude that it was a large majority. Yet, which of those persons was really cured?

At the Pennsylvania Hospital for the Insane, of seven thousand one hundred and sixty-seven admissions recorded in the report for 1875, only five thousand one hundred and eighty-six were cases of first attack. No less than one thousand nine hundred and eighty-one were of attacks subsequent to the first. One man was admitted on the twenty-second attack, and one woman

on the thirty-third; six men and six women on the tenth attack; ninety-four persons on the fifth attack; and one hundred and seventy-two persons on the fourth. Dr. Kirkbride does not state the number of times that any of these had recovered; but if a person have a thirty-third attack of a disease, it necessarily follows that he had previously recovered from thirty-two attacks.

Dr. Barnard D. Eastman, of the State Hospital at Worcester, is now engaged in an analysis of the cases treated at that institution from the time of its origin. The work was begun upon the cases of females, about one-half of which have passed under review. I am indebted to him for some of the results thus far attained.

Of two thousand nine hundred and forty-nine admissions, six hundred and ninety-four were readmissions. Hence, two thousand two hundred and fifty-five persons constituted two thousand nine hundred and forty-nine patients. The readmissions were equal to nearly one-third (30.80 per cent.) of the persons.

Seven persons were admitted an aggregate of one hundred and six times, or an average of a fraction more than fifteen times each. One was admitted twenty-three times, one eighteen times, one sixteen, one four-teen, one thirteen, and two, eleven times each. One of the seven persons was discharged recovered twenty-two times, one sixteen times, one thirteen times, two, eleven times each, one ten times, and one nine times. Consequently, the seven persons furnished ninety-two recoveries, or an average of a fraction more than thirteen recoveries to each person; and yet two of these persons died insane in the hospital, and a third is now an inmate of it, considered hopelessly insane. Thus, of the ninety-two recoveries presented to the readers of the Worcester reports, the permanent recoveries of persons were, at

most, only four.* Such is the chaff which, for a long period, the people of Massachusetts have been accustomed to regard as the kernel of the wheat. Very appropriately has Dr. Sheppard, of the Colney Hatch Asylum, England, remarked: "It is obviously one thing to formulate error, and another to formulate truth." What further revelations may be made in the prosecution of Dr. Eastman's enterprise, time alone can show; but, even should there be none of noteworthy importance, he may be well satisfied with these, as a full reward for his labor.

These cases of multiple admission and recovery sometimes materially affect the proportion of apparent cures for the year, as represented by the annual reports, in consequence of a resort to the hospital several times within the year of one of those cases of periodical mania, the duration of the paroxysms of which are very brief.

Soon after I became connected with the Bloomingdale Asylum, in 1844, I learned that the woman who was the subject of the remarkable case above mentioned, had been admitted and discharged, recovered, six times within the next preceding year. In the course of 1844 she was again received and discharged, recovered, six times. Following the example of my predecessor, I reported these recoveries in the tabulated statistics without any textual explanation.

In the next following year, 1845, the woman was admitted and discharged, recovered, four times. In the annual report for that year, all the cases of readmission were mentioned, and their results given separately. There were eleven readmissions and seven recoveries;

^{*}Since the above was written, I have learned that, of these four persons, one was again readmitted, at the Worcester Hospital, January 10, 1877. The second, since last at Worcester, has been discharged, improved, twice, from the Butler Hospital, at Providence, R. I., and, during the last seven years, has been a constant inmate of that hospital, incurably insane. The third "died at home, years ago, mental state not known;" and the fourth "probably died at home, circumstances unknown."

and in the context it was stated that "four of the cures mentioned in this table were restorations from successive attacks, in a case of paroxysmal mania." This case subsequently led to the introduction of the question of the proper method of reporting periodical cases, as a subject for discussion at one of the meetings of the Association of American Superintendents. After due consideration it was decided that no patient ought to be reported as recovered twice or more within one and the same year. It is evident, however, that this decision has not been universally, probably not generally, adopted as a rule of practice at the hospitals. As proof of this, in regard to one institution, we have the case of the woman who recovered twenty-two times, at the Worcester Hospital, as shown by Dr. Eastman's statistics. Four of her recoveries took place in one year, five in the next following year, and seven in the third year. Worcester, therefore, takes the palm from the brow of Bloomingdale, for the largest number of recoveries by one person within the course of twelve successive months. In this case, the woman, within a period of twenty years and two months, recovered twenty-two times, and spent eleven years and one month in the hospital.

In all the foregoing instances, as in many others which might be gathered from hospital reports, the percentage of recoveries is very considerably increased by this duplication and multiplication of them in the same person; and yet, by the way in which they are generally published, the uninitiated reader has no reason even to suspect that the number of persons recovered is not equal to the number of recoveries.

Aside from the repeated admissions and recoveries of the same person, there is another influence which has an important effect upon the proportionate reported restoration of mental disorders. I allude to the special characteristics of the person reporting them,—his temperament, his constitutional organization, his psychological individuality.

How often we find the people of a neighborhood differing in opinion in regard to a neighbor alleged to be insane! How frequently the superintendents of the hospitals are annoyed by persons holding this difference of opinion in regard to patients committed to their care, one party strongly asserting the existence of mental disorder, the other as strongly denying it. In the trial before legal tribunals of cases involving the question of the sanity or insanity of a prisoner or other person, it is not uncommon for even the most expert experts to differ in both opinion and testimony, taking opposite views of the mental condition in question. In a case like this, it is to be inferred that if, when that testimony is given, the person whose mental condition is in question were to be discharged from a hospital to which he had been committed when unquestionably insane, the experts upon one side would report him recovered, while those upon the other would record him as not recovered. The individuality mentioned has sometimes, though rarely, been recognized and acknowledged in the reports emanating from the institutions for the insane.

"It has come to be well understood among those familiar with vital statistics," says Dr. D. Tilden Brown, of the Bloomingdale Asylum, New York, in his report for 1867, "that they comprise an element not easily discovered among groups of figures, but which is, nevertheless, present as a leaven more or less potent. Borrowing a term from physiology, this element may be called the 'reflex action' of the observer's own temperament, and no just estimate of such statistics can be formed, until its value can be approximately determined."

For many years I have believed, and have often asserted that belief, that of a given number of patients discharged from a hospital for the insane, the number reported as recovered might differ at least twenty-five per cent., according to the man who might act as judge of their mental condition.

The medical history of the Worcester hospital, during the seven years next preceding the 1st of October, 1875, furnishes a remarkable illustration of the uncertainty of the statistics of insanity, as originating in the source under consideration.

From September 30, 1868, to October 1, 1875, there was no known agency operating upon the people from whom the patients of that hospital are drawn, which might either increase or diminish the prevalence of insanity, or so modify it as to render it less amenable to curative treatment. About the middle of the period a change of superintendents of the institution took place. Dr. Bemis resigned the office, and was succeeded by Dr. Eastman. This occurred within the official year 1871–72, so that each of those gentlemen occupied the office during a part of that year.

The last three entire official years of the administration of Dr. Bemis embraced the period from September 30, 1868 to October 1, 1871; and the first three of Dr. Eastman, the period from September 30, 1872, to October 1, 1875. The statistics of admissions and recoveries in the course of each of these periods, as derived from the published reports, are as follows:

FIRST PERIOD.

OFFICIAL YEAR,	Admissions.	Recoveries.	Per cent. of Recoveries.	
1868-69,	337	149	44.21	
1869–70,	384	158	41.11	
1870–71,		209	44.46	
Total,	1,191	516	43.32	

SECOND PERIOD.

Official Year.	Admissions.	Recoveries.	Per cent. of Recoveries.	
1872-73,	407	98	24.08	
1873-74	400	71	17.75	
1874-75,		90	24.86	
Total,	1,169	259	22.16	

Thus, although the number of admissions (one thousand one hundred and sixty-nine) in the second period was but twenty-two less than (one thousand one hundred and ninety-one) in the first, the number of recoveries (two hundred and fifty-nine) was but one more than half as great. The proportion of recoveries of the first period is to the proportion of recoveries of the second, as one hundred and ninety-five to one hundred, or as one hundred to fifty-one and fifteen hundredths. There is, in my opinion, but one explanation of this most surprising difference; and that is, the difference in the physical and mental constitution of the two men by whom these statistics were reported. Were it possible to apply to the two sets of cases a standard of sanity, and an accurate measure of mentality, it would doubtless be found that there were as many recoveries in the second period as there were in the first. In the expression of this opinion I desire to be emphatic, as I have too high a respect for both of the gentlemen concerned, to do or say anything which might be tortured into the appearance of injustice toward either of them.

There are yet other modifying agents which have undoubtedly acted, to some extent, in the production of the statistics of insanity, as they have in so many other departments and directions of the enterprise of mankind. The medical officers of institutions for the insane can claim no exemption from the common weaknesses of human nature. They are men "with like passions as

other men." Self-interest, in some instances, and ambition in perhaps all,—that ambition, at least, which is manifest in the desire to show as fair a record and as favorable results as are exhibited by colleagues in the specialty,—have probably not been wholly inoperative in the reporting of recoveries from insanity, even though unconsciously to the persons producing those reports. These influences have constituted, and, from the very nature of things, always must constitute, an element in the solution of the problem of the curability of mental disorders.

Of all the causes which have contributed to the production of the impression that those disorders yield to curative treatment in a larger ratio than is now believed by physicians best acquainted with the subject and having the largest practical experience, the most potent has been the frequently repeated assertions of their eminent curability, by the superintendents of hospitals, and by some other writers upon the subject. In proof of this assertion, it is proposed to present a cursory history of the subject during the last fifty or sixty years, with quotations of such evidence as the annals of the period may furnish.

In the year 1820, Dr. George Man Burrows of London, England, published a small work entitled "An Inquiry into certain Errors relative to Insanity," one object of which was to demonstrate that mental disorders are more curable than was at that time generally supposed. He therein asserts, that, of all the cases which had been treated by him, both in general practice and in his private asylum, "including patients in a state of fatuity, idiocy, and epilepsy, the proportion of recoveries was eighty-one in one hundred; of recent cases, ninety-one in one hundred; of old cases, thirty-five in one hundred." He admits that he had "been

much favored by an unusually large proportion of recent cases;" and in his "Commentaries," published eight years afterwards, he acknowledges that his percentage of cures "appeared by some to be doubted."

Dr. Burrows had treated only two hundred and ninety-six cases, not half so many as are to-day under the care of Dr. Godding, at Taunton. Of the two hundred and forty-two recent cases, two hundred and twenty-one recovered, and of the fifty-four old cases, nineteen recovered.

In the appendix to the inquiry, the Doctor published the statistics of the recoveries at the Retreat, at York, from 1796 to 1819. These were furnished by Samuel Tuke, and were classified according to the duration of the mental disorder. They are as follows:—

Савов.	Duration. Attack.		Recov- ered.	Per Cent.
47	Less than three months,F	irst,	40	85.10
45	Three to twelve months, F	irst,	25	55.55
34	Under twelve months, N		21	61.76
48	Under two years,F		12	25.00
79	More than two years,	14	17.72	

Hence are derived the further statistics that, of the ninety-two cases of first attack, and of less than one year in duration, the recoveries were sixty-five, or a proportion of seventy-six and fifty-two hundredths per cent. Of all the cases (one hundred and twenty-six) of less duration than one year, whether of first or subsequent attack, the recoveries (eighty-six) were equal to sixty-eight and twenty-five hundredths per cent. The ratio of recoveries of the whole number treated was forty-four and twenty-three hundredths per cent.

The next authority to which our attention is called, is the annual report of the Retreat, at Hartford, Connecticut, for the official year 1826-27. The information contained in that report "fell upon dry and stony

ground," and doubtless would have there remained, fruitless and comparatively unknown, had it not been gathered and disseminated by a traveling foreigner. Captain Basil Hall, of the Royal Navy of Great Britain, visited the Retreat on the 25th of October, 1827, and gave an account of that visit in the history of his American tour, which was subsequently published.*

"Dr. Todd," says the Captain (vol. 2, p. 192,) "the eminent and kind physician in charge of the Retreat, gladly communicated his plans, and showed us over every part of this noble establishment—a model, I venture to say, from which any country might take instruction." Upon subsequent pages he copies "extracts from the report of the visiting physicians," one of which is as follows:

"During the last year there have been admitted twenty-three recent cases, of which twenty-one recovered, a number equivalent to ninety-one and three-tenths per cent. The whole number of recent cases in the institution during the year was twenty-eight, of which twenty-five have recovered, equal to eighty-nine and two-tenths per cent."

Thus recognized and endorsed, not merely in Great Britain, but by a representative of that arm of her power in which has hitherto rested her confidence, as the source of her greatest pride and glory, the "report of the visiting physicians" suddenly became worthy of recognition upon this side of the Atlantic. The newspapers took it up and sent it through the length and the breadth of the land; and in this way, whatever a few physicians and others might have previously learned from the report itself, the people at large received their first impression that insanity is largely curable. By a few strokes of his magic pen, Captain Hall did what,

[&]quot;"Travels in North America, in the years 1827 and 1828" by Captain Basil Hall, Royal Navy. In three volumes. Edinburgh, 1829.

[†] Vol. 2, page 196.

were it not for him, would have required the labor of years.

Very soon after the appearance of this book in the United States, and while the memory of the Hartford statistics was still fresh and vivid, Massachusetts caused to be erected her first State Hospital for the Insane, at Worcester. It was opened in January, 1833. Dr. Samuel B. Woodward, its first Superintendent, came directly from the atmosphere of the Hartford Retreat. That institution was in part indebted to him for its existence. He was one of the few who took the initiatory measures for its foundation; he was one of the original directors to whom its charter was granted; and its welfare had always been to him an object of interest and solicitude.

Dr. Woodward's intellectual abilities were considerably above the average. He was cheerful and sanguine, and much interested in his specialty, which he consequently pursued with enthusiasm and entire dedication of time and thought and feeling. Both his physical temperament and his intellectual constitution were such as not only to induce, but perhaps to force him to "look upon the bright side of things," whatever might call for his opinion or action.

A man so constituted, having such antecedents and the reported success at Hartford as an example, would not be likely to present the subject of insanity, as it appeared at Worcester, in a less cheerful light than nature and truth would justify. In his second annual report, which embraced the official year terminating with the 30th of September, 1834, he wrote as follows, in his summary of the statistics of the year: "Recovered, of all the recent cases discharged, eighty-two and one-quarter per cent." The reader will please observe that this high percentage represents the ratio of recoveries to cases discharged, and not to cases admitted. It

is believed that a non-observance of this fact, by the casual or the careless reader, was one cause of the erroneous impression conveyed to the public mind.

In his third report, the Doctor says, "Recoveries of those patients during the year ending November 30, 1835, whose insanity was less than one year's duration eighty-two and one-half per cent.;" and, upon another page, "In recent cases of insanity, under judicious treatment, as large a proportion of recoveries will take place as from any other acute disease of equal severity." It is believed that this was the first public annunciation, in America, of the principal idea of the proposition contained in the quotation; namely, the curability of insanity as compared with other severe acute diseases.

In the fourth report, for 1836, he says, "Per cent. of recoveries of recent cases discharged, eighty-four and one-fifth;" and in the fifth, for 1837, "Per cent. (of recoveries) of recent cases discharged of less than one year's duration, eighty-nine and one-fifth."

Whatever erroneous idea may have, thus far, been inadvertently and unintentionally produced by the method of computing the proportion of recoveries upon the number discharged, it ought to have been corrected by the subjoined extract from the report for 1838, in which the language would imply that it is computed upon the number admitted.

"There have been admitted, since the hospital was opened, three-hundred and thirty-four cases of less duration than one year; of which, two hundred and seventy-six have recovered, which is about eighty-two and two-thirds per cent.

In most institutions, it is customary to deduct those that have not had sufficient time; this may be said of the twenty-eight recent cases left in the hospital at the end of the year; these deducted, the per cent. of recoveries will be ninety and one-half.

If we make a further deduction of the deaths of the cases from this class, which is also the rule in many institutions, we should increase the per cent. to about ninety-four."

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Although apparently avoiding the erroneous method of computation before mentioned, this extract well illustrates the prevalent desire of the time at which it was written to produce enormous percentages. That both reason and common sense were sacrificed to that desire, is sufficiently proved by not this quotation alone, but by others, from other sources, yet to be produced. In the second paragraph of the above extract, the reader is asked to reject all cases remaining in the hospital, although unquestionably a considerable part of them were incurable; and, as if this were not enough, he is then, in the third paragraph, invited to set aside all who have died!

If, in calculating the curability of mental disorders, all cases of mortality are to be rejected, why not in all other diseases? The principle appears as reasonably applicable in pneumonia or typhoid fever as in insanity, but it is a principle better adapted to the consolation of the physician than to the discovery of truth in science. Let it be applied, for example, to consumption and Asiatic cholera; calculate the percentage of recoveries accordingly, and behold what harmless diseases they immediately become!

In the seventh report of the hospital at Worcester, the proportion of recoveries, for the year, of recent cases discharged, was asserted to be ninety (90) per cent.; in the eighth, sixty-four patients of seventy, equal to ninety-one and forty-two hundredths per cent.; and in the ninth, ninety-one per cent. This was in the latter part of the year 1841. "The average of recoveries of cases of less duration than one year," says this report, "is now eighty-eight per cent. for the whole time (nine years,) and is as great as can be expected."

When Dr. Woodward took charge of the hospital at Worcester, there were but eight other institutions, specially devoted to the care and custody of the insane,

in the United States. Four of them were incorporated, and only three-in Virginia, South Carolina and Kentucky-belonged to the States, respectively, within which they are situated. Of a majority, at least, of the eight, the chief medical officer was merely a visiting physician engaged in general practice. Annual reports were published by but a part of them; and such as were published were brief, and their circulation very limited. Thus circumstanced, there was a golden opportunity for the Doctor to disseminate among the people some knowledge of insanity and its treatment in hospitals, and thus give an impetus to the thitherto languid and lagging enterprise for the amelioration of the condition of the insane upon this side of the Atlan-This opportunity he did not fail to seize. His very elaborate reports, abounding in statistics, as well as in other matter more attractive to the general reader, were widely circulated, and he soon became known, not only throughout the States, but likewise in Europe, and was generally regarded as the highest living American authority in the treatment of mental disorders. In the course of the ten years next following his removal to Worcester, no less than twelve hospitals for the insane were founded and opened within the States, and seven of them were State institutions. The superintendents of some of these were men of no less ability than Dr. Woodward, and they entered heartily into the prosecu-Some of the older institutions. tion of their work. meanwhile, had become newly and ably officered. Dr. Bell had taken charge of the McLean Asylum, and Dr. Brigham of the Hartford Retreat. A spirit of emulation was aroused, which, at length, by stimulation, became what might more properly be termed rivalry, albeit the generous rivalry of friends, and conducted, as a whole, in the love of science and under the promptings of benevolence.

We are now approaching the maximum mathematical curability of insanity. The foregoing historical paragraph was considered important, as showing some of the causes which led to it. In 1840, the Worcester Hospital had attained, as shown above, a proportion of ninety-one and forty-two hundredths per cent., and in 1841, ninety one per cent. The precentage of Dr. Burrows, as has been seen, was ninety-one.

In the report of the Eastern Asylum for the Insane. in Williamsburg, Virginia, for the year 1842, Dr. John M. Galt, the Superintendent at the time, quoted the percentages of recent cases claimed to have been cured by Sir William Ellis,* Dr. Burrows, Dr. Woodward, and, on the authority of Basil Hall, the Retreat at Hartford. He then gave a statistical account of thirteen cases of recent insanity received at the institution under his charge in the course of the year from July, 1841, to July, 1842. Six months after the expiration of that year, twelve of them, equal to ninety-two and three tenths per cent., had recovered, and one had died. The Doctor describes this single case of mortality, and then, adopting that admirable principle of exclusion, the precedent for which, in this country at least, had been established by Dr. Woodward, says, "If we deduct this case from those under treatment, the recoveries will amount to one hundred per cent.!" "From such facts as the above," he continues, "I am led to believe that there is no insane institution either on the Continent of Europe, in Great Britain, or in America, in which such success is met with as in our own."

The considerate reader will forbear to arraign the Doctor for a deficiency of modesty. He had excelled his colleagues in the work of benevolence, and who but

^{*}In his treatise on insanity, published in 1838, Dr. Ellis does not discuss the subject of curability. Probably this claim, "about ninety per cent.," was made in a report of either the Wakefield or the Hanwell Asylum, with each of which he was at different times connected.



he could make it known? He had produced the thitherto maximum of percentage figures, including deaths; nay, more, had he not, under a recognized principle, mathematically demonstrated the curability of one hundred per cent., that is, all of the insane? Lest the living may not reply to this interrogation, I call upon the dead. What says Dr. Bell, of the McLean Asylum, thereupon,—Dr. Luther V. Bell, than whom, in the United States of America, no abler man, intellectually, and no more conscientious man, morally, has ever been engaged in the specialty of psychology?

"The records of this (McLean) Asylum," says he, in his report for the year 1840, "justify the declaration that all cases, certainly recent,—that is, whose origin does not, either directly or obscurely, run back more than a year,—recover under a fair trial. This is the general law; the occasional instances to the contrary are the exception."

These things sound so very strange at the present day, that, in order to reassure the reader, it would appear proper to inform him that no instance is recollected, and none, at the time of the present writing, has been discovered in the books, in which the claim to have cured more than one hundred per cent., or even that more than one hundred per cent. are curable, has been advanced. Logically, perhaps, claims of that nature might have been made; because the foregoing extracts from Galt, Bell, and Woodward were written more than thirty years ago, and some of the writers of the present day apparently believe that great improvements have been made in the treatment of insanity since that time.

Although the spring-tide of mathematical curability had now apparently attained its highest point, and Dr. Galt was upon the crest of its topmost wave,—with Dr. Bell beside him in opiniative curability, for Dr. Bell

entertained an inveterate dislike of the Arabic numerals as applied to insanity,—yet a further change was in reservation in the undeveloped but still immediate future. In only one short year after the recounted success at Williamsburg, Dr. Awl—there was a prophecy even in the sound of his name—in his report, for 1843, of the State Hospital for the Insane at Columbus, Ohio, thus unpretentiously but pithily announced his achievement for the year:—

"Per cent. of recoveries on all recent cases discharged the present year, one hundred." And so the goal was won; the summit of the maximum wave of the highest possible high water point was gained! Dr. Awl, who had "studied at the feet of Gamaliel," (Dr. Woodward,) and who was always his loyal disciple, had outrivaled, not his master alone, but all other competitors.

But Dr. Woodward, in his report for the same year, (1843,) wrote as follows:

"I think it not too much to assume that insanity, unconnected with such complications (epilepsy, paralysis, or general prostration of health,) is *more** curable than any other disease of equal severity; more likely to be cured than intermittent fever, pneumonia, or rheumatism."

Dr. Bell's report for the same year contains a general review of all the cases, "somewhat exceeding a thousand," which he had treated during his connection with the McLean Asylum, in which he says: "The best judgment I can form is, that six out of every ten discharged, including those considered unfit, those discharged with incomplete trial, and those dying prior to the event being determined, have recovered." Of those cases the duration of which was less than six months at the time of admission, he says: "Certainly ninetenths have recovered."

^{*} Not italicized in the original.

After the Ohio triumph of 1843, there were indications, in some quarters, of an ebbing of the tide. Dr. Woodward, indeed, in his report for 1844, reported the recoveries of recent cases, at Worcester, at ninety-three per cent., and thus excelled his former self; but in that for 1845, his thirteenth and last, this percentage receded to eighty-nine and one-half. Dr. Chandler succeeded Dr. Woodward, and in his report for 1846, the retrograde movement was still greater than in the next preceding year, the proportion of recoveries of recent cases being but seventy-nine per cent. This recession, however, was subsequently in part recovered from, and during the ten years' administration of Dr. Chandler, the average was eighty-three per cent., whereas, during the whole period of Dr. Woodward's administration. it was eighty-eight per cent.

Even Dr. Awl never again equaled himself. prophecy was never fulfilled but once. In 1844 hispercentage of recoveries of recent cases discharged, receded to eighty-nine and forty-seven hundredths; but in 1845 it mounted to ninety-five and twelve hundredths, and in 1846 to ninety-five and thirty-eight hundredths. In 1847 it again receded, and, this time, to eighty-eight and forty-four hundredths; but only to remount, in 1848, to ninety and thirty-six hundredths; and, in 1849, as shown by his eleventh and last report, to ninety-three and twenty-five hundredths. report he states that the "per cent. of recoveries on all recent cases discharged in eleven years, was ninety and seventy hundredths. The reader will observe that all these proportions related to cases discharged, and his attention is called to the comments upon them, by Dr. Awl's successor, as presented upon a subsequent page.

But Dr. Awl was content with the permission to his numerals to speak for themselves. In this he was almost purely a statistician in Arabic. So far as I have learned, he neither vaunted his success, nor proclaimed the pre-eminent curability of insanity, in the text of his reports. Ardent, hopeful, joyful in temperament, he naturally presented his subject in a light sufficiently couleur de rose; but, for the same reason, he endeared himself to his colleagues, of whom every survivor would now exclaim: "May his genial heart still beat for a thousand years."

He would be mistaken who should entertain the belief that, throughout this period of apparent struggle for the largest numerical symbols, there was a unanimity of opinion and feeling among the Medical Superintendents of the Institutions. Yet, whatsoever might have been thought, or, in conversation expressed upon the subject, but little, if anything, appeared in the published reports discrediting either the asserted results of treatment, or the accuracy of the method by which the numerical statistics were obtained. Dr. Isaac Ray, in the report for 1842 of the State Asylum at Augusta, Maine, wrote as follows: "Nothing can be made more deceptive than statistics; and I have yet to learn that those of insanity form any exception to the general rule." But the first important shadow of this kind which was thrown upon the glamour of Arabic numbers, was projected by Dr. James Bates, a man of sterling common sense, the successor of Dr. Ray. In his report for 1847-48, he used the following language:

"Few things are more various, in the numerous reports which come to hand from institutions similar to our own, than what are termed recent cases. In general, of late years, cases admitted within one year of the attack are denominated recent. This would be very well, and easily understood, if such cases were continued to be recent cases, in the reports, until discharged. But such is not the fact. In one report which contained a table purporting to give the admissions and discharges of recent and old

cases, it was seen that the recoveries, discharges, and deaths, together with recent cases remaining, were much less than stated in the admissions. Further examination showed, that at the end of each year those remaining in hospital which had become of more than one year's standing, were turned over to the department of old cases.*

"By such a course, and rejecting deaths, paralytic and epileptic cases, and perhaps some others, from the aggregate, the cures of recent cases are very conveniently carried up to ninety per cent.

"It is probable, in some instances, this rejection and pruning away of exceptionable cases might be carried so far that one hundred per cent. of recoveries in recent cases could be reported, and received with wondrous admiration by that portion of the public who are better pleased with marvellous fiction than with homely truth."

Not satisfied with this, he again expressed his opinions, and perhaps more strongly, when discussing the subject of statistics, in his report for 1849-50. Says he:

"When honestly made, they are not likely to do injury; but I am sure they are sometimes made the instruments of deception. If figures can not lie, they may mislead, by disguising the truth. For instance: suppose, at the end of each year, instead of reporting all cases as recent which were actually admitted within one year of the attack, I should, for the purpose of appearing to cure ninety per cent. of recent cases discharged, report only such as recent cases as had not become old ones by remaining with us, I might impose the belief on the uninitiated, that ninety per cent. of recent cases could be cured, when every man acquainted with the subject knows that no instance can be shown in which ninety

^{*}The practice mentioned may be illustrated as follows: A hospital receives one hundred (100) recent cases, and reports them as such. It discharges eighty (80) of them while recent; and, of these eighty, (80,) seventy (70) have recovered. Consequently, seven-eighths, or eighty-seven and one-half per cent. of the number discharged, are reported as recovered. The remaining twenty (20) of the original one hundred (100) stay in the hospital so long that their disease has existed more than a year, and hence is no longer recent. They are then transferred to chronic cases, and thenceforth, in all statistics relating to them, are reported as such. It is thus made to appear, that of the original one hundred (100) cases, eighty-seven and one-half per cent. recovered, when, in fact, only seventy per cent. recovered. There was a time at which this practice was pursued at more than one hospital.

out of one hundred cases, admitted in succession, no matter how recent, were ever cured."

About this time, Dr. S. Hanbury Smith, a man of broad culture and extensive professional knowledge, was appointed to the superintendence of the State Asylum for the Insane, at Columbus, Ohio. In his report for 1850, he presents the statistics of all the recent cases of insanity received at that institution, from the time of its opening to the 30th of November of that year; and shows that the recoveries, according to the records, and including those remaining in the hospital who were believed curable, were equal to seventy-five and forty-three hundredths per cent. "The curability of recent cases in this institution," he then remarks, "would be exactly represented by these figures, were it certain that the word recovered, when entered opposite a name on the books of the institution, is always properly employed. The term has probably been applied to many cases which were only very much improved, but not in scientific strictness cured, seventy per cent. being considered by some authorities as about the limit of possible cures in recent cases."

Dr. Andrew McFarland's first report of the New Hampshire Asylum for the Insane, was for the year 1846. He classified the cases of both admission and discharge into recent and chronic, but calculated no percentage. In his third report (for 1848) he dropped that classification and gave expression to his views in the following language:—

"This is deemed a proper time and place to record a skepticism as to the value of a system of forming tables, or rather the want of system, in making important deductions, and establishing infallible percentages from extremely loose and insufficient premises, and all now engaged in the treatment of the insane appear to be arriving at the same conclusion."

The period of greatest mathematical curability had now very evidently passed; that spring-tide upon which the members of the regatta had been disporting for a number, not inconsiderable, of years, had begun to ebb, and has continued to ebb, as will be shown farther on, to the present time, when it has reached, perhaps, upon the average, very nearly the true water level.

At this point, however, it may still further elucidate our subject to show the position in regard to it which was occupied by several medical superintendents in charge of institutions during some part of the period of high percentages, but of whom little or nothing has thus far been written.

Dr. Ray, at heart, never approved the course of the advocates of mathematical curability. Upon his entrance into the specialty it is not surprising that he joined them, but he did it under protest, and, at the very first opportunity, he threw off all allegiance to them. In his first report, which was that for the Maine Insane Asylum, for the year 1841, he classified his cases into recent and old, the former term applying to those of less than one year in duration. "I have adopted this classification," says he, "in deference to the practice now somewhat common in New England hospitals; but I must be allowed to express my conviction that the distinction is without any precise, well-marked difference, and had better be abandoned."

In giving the results of treatment, he says:—"Per cent. of recoveries of recent cases discharged in the course of the year, seventy-one;" and then, in a foot-note, he remarks as follows:—"Two of the recent cases discharged uncured, were returned to the hospital and finally discharged, cured; so that really the per cent. of recoveries of recent patients is seventy-five." In another place, he says:—"Our proportion of recoveries in recent

cases, as indicated by our books, has been seventy-one per cent., though, if we make allowance for cases prematurely removed, it amounts to eighty-five per cent. which is the average of recoveries obtained in the New England hospitals generally."

Dr. Ray never built a percentage a second time, in the hope to make his mathematical house as high as those of his neighbors. Thenceforward both at the Maine Asylum and at the Butler Hospital, he discarded classification according to duration, eschewed percentages, and, especially at the institution last mentioned, dealt but little in other numerical statistics.

Dr. Amariah Brigham wrote but two annual reports of the Hartford Retreat. The last of these is the only one to which I have access. It is for the official year ending with the 31st of March, 1842. Before the termination of that calendar year he was appointed to the superintendence of the New York State Asylum, at Utica, which was opened, under his direction, on the 16th day of January, 1843. In the report of the Retreat, he says: "The records of this, and of all kindred institutions establish the fact that insanity is a disease that can generally be cured, if early and properly treated; while it is equally well established that if the disease is neglected, or suffered to continue for two or three years, it is rarely remedied. In his first report (for 1843) at Utica, he says: "Eighty patients have been discharged. Fifty-six of these were recent cases, that is, of not more than twelve months' duration. this number forty-nine recovered." The percentage of these recoveries is not stated, and neither in the report of the Retreat, nor any one of the six annual reports which he lived to write at Utica, have I found any such percentage. He did not classify his cases in tabular form, as recent and chronic, and the instance just quoted is the only one in which, as regards recovery, he

mentioned the numbers with such a discrimination. He was not a competitor in the regatta of mathematical curability. But in this connection, and as a matter illustrative of our subject, I copy the following from his last report for the Retreat.

"By recovered, we usually mean complete restoration of the mental powers. Two of the individuals discharged this year, and reported as recovered, are still very eccentric, though they do not now manifest anything that their friends call insanity, are able to attend to their affairs, and are as well as they were for several years before they were called insane.

"Some few other individuals, though reported recovered, did not, when they left us, exhibit their former mental vigor. From several of these we have heard that, at home, they have entirely recovered in this respect, or are steadily improving. With these few exceptions, those that we have reported recovered we consider completely so."

If limitations so comprehensive were given to the term "recovered" by a moderado, like Dr. Brigham, what might not be granted to it by an ultraist, such as were some of the medical superintendents.

In the annual presentation of the medical history of the Pennsylvania Hospital for the Insane, Dr. Thomas S. Kirkbride has very prudently and properly avoided the classification of patients according to the duration of the disease; and, although apparently a believer in the curability of insanity to an extent which would not be accorded by a large proportion of the superintendents of the present day, he has never been among the extremists, has written but little upon that specific point, and has invariably, I believe, shunned percentages in Arabic numerals. In an examination of his first fifteen annual reports, I find but two allusions to the curability of the disease, of sufficient directness and importance to come within the scope of this discussion. In the report for 1842 he says: "The general proposition that truly recent cases of insanity are commonly

very curable, and that chronic ones are only occasionally so, may be considered as fully established."

In the report for 1846 the proposition is made rather more definite by the use of a percentage—perhaps the only one to be found in his reports—expressed in words. "Of all who are attacked with insanity, and subjected during its early stages to a judicious treatment, and that treatment faithfully persevered in, at least eighty per cent., will probably recover."

In his report for 1844, of the Bloomingdale Asylum, New York, the first which was issued after he became connected with it, Dr. Pliny Earle presented a table of "cases supposed to be recent," in which it is stated that the number discharged was fifty, of which forty-five had recovered. Nothing was said of percentage in regard to them; but the subjoined extract is taken from the context.

"It appears to be very satisfactorily proved that, of cases in which there is no eccentricity or constitutional weakness of intellect, and when the proper remedial measures are adopted in the early stages of the disorder, no less than eighty of every hundred are cured. There are but few diseases from which so large a percentage of the persons attacked are restored."

In his report for 1845, the table of recent cases states that of fifty-seven cases discharged, thirty-six were cured; and in connection therewith, it is remarked that four others, "discharged much improved, were entirely well a short time after they left. These make the number of cures in recent cases forty."

In a discussion of the subject of treatment, in the same report, occurs the following proposition: "When the insane are placed under proper curative treatment in the early stages of the disease, from seventy-five to ninety per cent. recover."

The author of those reports deprecates, in regard to these extracts, no comment which he has here applied to the same assertions, or assertions equally strong, but no stronger, by any one of his colleagues. But, thirty-two years ago, Dr. Earle was somewhat younger and less experienced than he is now. His practical knowledge of the treatment of insanity, at that time, had been derived from a number of cases very considerably less than that of those who are under his care to-day. He has had time, and opportunity, and reason to modify many of his opinions; and among those modified opinions is that of the curability of insanity. Doubtless there are others of the writers here quoted, who would now seek protection, and who deserve it, under a similar plea.

The reports of Dr. William H. Rockwell, of the Vermont Insane Asylum, were models of sententious brevity. Their author indulged sparingly in numerical statistics, but he always gave the percentages of recoveries calculated upon the number of patients discharged, and with unvarying discrimination between "old cases" and "recent cases." The percentages of the recent cases always ranked among the highest, but only in one instance did they exceed ninety. This was in 1839, when the percentage was ninety-one and thirty-three hundredths. In all the other years from 1838 to 1845, inclusive, they fluctuated between the two extremes, eighty-seven and fifty hundredths and eighty-nine and seventy-four hundredths.

In his report for 1849, in connection with a summary of all the patients theretofore treated at the institution, it is stated that, "of those placed at the asylum, within six months from their attack, nearly nine-tenths have recovered."

Dr. William H. Stokes, in the report for 1845, of the Mt. Hope institution, at Baltimore, Maryland, discoursed as follows:

"In our former reports for 1843 and 1844, we assumed the high ground, that not merely nine out of ten cases of insanity, of a less duration than one year, may be cured, but that ninety-nine in a hundred can be radically restored, unless there exists in the individual a strong constitutional tendency to mental disease, or unless circumstances beyond our control, and the injurious tendency of which has been fully explained, intervene to interrupt and disturb the process of cure. This position has been fully sustained, as the report will show, by the experience of the past year."

In respect to this quotation, it may be remarked that, while the proposition may be strictly true, as interpreted by an expert of long experience, yet the popular reader would be likely to remember the large proportions in its assertive clause, while forgetting, or rather not knowing, the broad scope of the contingent clause, as introduced by the word unless. These contingencies have, since that time, practically proved their power in the very great reduction of the assumed proportions. Ninety-nine cases in a hundred, of any disease may be cured, unless something prevents.

In the report for 1841, of the Western Lunatic Asylum, at Staunton, Virginia, Dr. Francis T. Stribling, a most estimable man and an excellent superintendent, introduced a numerical table to which he appended these remarks:

"From this table it will be perceived that the whole number of recent cases during the year, in which an opportunity has been afforded to test the use of medicines, amounts only to twenty-one, of whom eleven were males, and ten females. Of these, seventeen recovered, nine males and eight females; two females are improved, one male is stationary, and one male died. From this estimate is excluded, of course, those patients who entered the institution within the last twenty days, as their stay has been of too short duration for the effects of remedies to be developed. The individual above included as having died, was only here sixteen days, and for the same reason should also be excluded, which would leave as proper subjects for this table twenty only, of whom eighty-five per cent. have recovered, a result which we confidently believe will bear honorable comparison with that in any

other insane institution in existence, and one which should speak trumpet-tongued to those misguided individuals who, notwithstanding the lights which have been shed upon this important subject, within a few years past, obstinately persevere in retaining their insane friends at home, or in situations equally unfavorable, until their malady becomes confirmed and they are rendered, for life, the victims of insanity, it may be, in some one of its most aggravated and distressing forms."

His report for 1844 contained, in tabular form, the number of recent cases admitted from July 1, 1836, to December 31, 1844, together with the results of treatment and the percentage of those results. The recoveries, as calculated upon the admissions, were equal to eighty-two, and as calculated upon the discharges, ninety-three per cent.

Of writers other than the Medical Superintendents, there is but one the opinions of whom it appears necessary here to notice.

Several years ago, Dr. Edward Jarvis wrote as follows:

"In a perfect state of things, where the best appliances which the science and skill of the age have provided for healing are brought to bear upon these lunatics in as early a stage of their malady as they are to those who are attacked with fever or dysentery, probably eighty, and possibly ninety per cent., would be restored, and only twenty, or perhaps ten per cent., would be left among the constant insane population."

To the superficial reader, particularly if he be young and enthusiastic, this reads well, appears full of promise, and may be received as the assertion of a positive proposition in scientific truth. The thoughtful reader finds it too heavily laden with the conditional, the doubtful and the impossible. "Go to the foot of the rainbow"—how often it was heard, and how it excited our admiration in boyhood—"and you will find a golden cup." "In a perfect state of things," the writer

might better have said, "there would be no insanity," for that would have been a positive truth. The "perfect state of things" which he fancied, is unattainable, and consequently the whole substance of the proposition is little better than speculation.

It is utterly impossible, and so will it continue to be throughout all time, unless the characteristics of insanity undergo very important changes, to subject the insane to curative treatment at as early a stage of their disorder as are persons seized with fever or dysentery. In a very material proportion of the cases—more than ten, and, in my opinion, more than twenty per cent. the approach of the malady is so slow and insidious, that the insanity is not recognized, often not suspected, until it has passed the period in which it might have been amenable to appropriate treatment. Hence, practically, it is chronic and incurable from the beginning. To this class belong all cases of paresis—the paralysis générale of the French—as well as those in which natural peculiarities or eccentricities gradually increase with advancing years, until they become so exaggerated as to be generally and properly accepted as the manifestations of insanity; those in which the brain and the nervous system in general hopelessly, and somewhat suddenly, succumb to the accumulated deleterious effects of intemperance in intoxicating drinks and of other forms of dissipation; and those of "spoiled children," who, by the results of unwise management during the periods of youth and adolescence, become some of the annoyances, par excellence, of the hospitals. There are other cases still, but it is unnecessary here to mention them.

The last clauses of the proposition quoted from Dr. Jarvis, those which express the deduction or the sequence of the conditional premises, are deprived of force by the assertion of a "probability" and a "possi-

bility," instead of a certainty. But, as has been shown, the certainty has not been, and it can not be, demonstrated. At most, then, the quotation, strictly interpreted, signifies that by the performance of an impossibility, you may arrive at a probability or a possibility.

But very much to my surprise, and, as I apprehend, to that of every person of long and large experience with the insane, Dr. Jarvis has quite recently repeated his proposition modified to a more positive form. "Under appropriate influences," says he, "insanity is among the most curable of grave diseases. If the persons who are attacked with this disorder are as promptly cared for as others when attacked with fever, dysentery, pneumonia, etc., eighty or ninety per cent. can be restored to health and usefulness."*

But even this is the expression of a hypothesis which requires, as is shown above, an impossibility—the placing of the patient under treatment as immediately as in the other serious diseases mentioned.

Familiarity with the writings of Dr. Jarvis, and a personal acquaintance with him of not less than thirty-five years, have led me to regard him as one of the ablest statistical philosophers of the United States. Perhaps no American has been more deeply interested in the subject of insanity than he, and few have made themselves so extensively acquainted with its literature. His practical knowledge of it is, nevertheless, but small. He has never been connected with a public hospital for the insane, except for a few years as trustee, and his experience in the treatment of the disease is limited to cases in general practice, and a comparatively very small number in a private asylum. Had his observation extended over the large numbers who have been under the care of any one of a dozen

^{*}Fifth Annual Report of the State Board of Health, of Massachusetts, page 382.



superintendents who might be named, he never, as I believe, would have written either of the foregoing extracts; for he is a conscientious searcher after truth, and no less conscientious in the expression of what he believes to be the truth.

But the essence of the proposition is not original with Dr. Jarvis. Dr. Woodward, as has already been shown, expressed and published it forty years ago. Dr. Burrows did the same more than fifty-five years ago. Upon page thirty-seven of the "Inquiry," already mentioned, he says he has "a clear conviction that it (insanity) admits of cure in a ratio equal with almost any disorder marked by as strong indications of morbid action in the corporeal system;" and farther on (page fifty,) reasoning from his own success, as shown by his numerical statistics, he adds, "It is a legitimate inference that, if no other impediments than are usually opposed to the successful termination of corporeal diseases supervened, the recoveries of cases of insanity would be actually in excess" of those of other diseases.

It is now proposed to introduce the statistics of some authorities who have not found mental disorders, when treated within a twelvementh from the time of invasion, to yield to curative measures in so large a proportion as most of those hitherto quoted. They deal with comparatively large numbers of cases, and hence are more reliable as premises from which to deduce truthful results, than the twenty-three cases of the Hartford Retreat which, thanks to Basil Hall, made so much noise in the world; or the thirteen cases of Dr. Galt, upon which he claimed the championship of success; and, being based upon all the cases admitted, their results are more truthful, as an expression of actual curability, than the highest percentages of Drs. Woodward and Awl, which were derived from the numbers of

cases discharged. The first, and the most valuable for our present purpose, of these statistics, are those of the Friends' Asylum, at Frankford, Philadelphia. They are the most valuable, because of the means of their analyzation, to a certain extent, with which I have been furnished by Dr. Worthington.

The Friends' Asylum was opened in 1817. It is a small institution, the number of its patients at any time not having been one hundred. Hence every patient comes more directly and constantly under the observation and influence of the physician-in-chief, and is more subjected to "individual treatment" than is practicable in the large hospitals. No public or corporate institution in the country approaches more nearly to the ideal "cottage" plan. It has always been well managed, and its rank as a first-class curative institution has never, to my knowledge, been questioned.

The report of that Asylum, issued this year, informs us that the whole number of cases of less than twelve months' duration, admitted since the opening of the institution, was one thousand and sixty-one. Of these cases, six hundred and ninety-seven, or sixty-five and sixty-nine hundredths per cent., recovered. This proportion is already small compared with some which have been noticed. But let us examine a little farther. Of these one thousand and sixty-one cases, one hundred and eighty-seven were of readmissions. Hence the number of persons was eight hundred and seventy-four. Eighty-seven (87) of these persons recovered two hundred and seventy-four times, or one hundred and eigthyseven times more than the number (eighty-seven) of These were duplicate or multiplicate recover-Subtracting them (one hundred and eighty-seven) from the total (six hundred and ninety-seven) recoveries, the remainder is five hundred and ten recoveries, and these are the recoveries of persons. Consequently,

of eight hundred and seventy-four persons, five hundred and ten recovered. This is equivelant to a percentage of fifty-eight and thirty-five hundredths. This process makes a material alteration in the aspect of things, if the proposition be to ascertain the proportion of recovories of insane persons. Only fifty-eight (without the fraction) of each hundred recovered. And these were not all permanent recoveries. Of the five hundred and ten persons who recovered at least once each, eightyseven were admitted on subsequent attacks. Therefore, at most, only (five hundred and ten less eightyseven) four hundred and twenty-three persons were permanently cured. This is but forty-eight and thirtynine hundredths per cent. of the whole (eight hundred and seventy-four,) or less than forty-nine in each hundred. It is very far from certain, it is not even probable, that so many were permanently cured. Who knows how many of them suffered from subsequent invasions of the disorder, slighter, perhaps, than the first, and for this reason—or perhaps quite as severe as the first, and for some other reason, for such reasons are many—detained and treated at home? Who can tell the number that, having a recurrence of the malady, were taken to some other institution? Such changes are not infrequent, and in this instance would be particularly likely to occur, from the fact that, in the course of the period during which these persons were admitted, several other excellent institutions were established within the territory from which the Friends' Asylum, in its earlier vears, received its patients.

At some of the institutions, a number not inconsiderable of the admissions of recent cases are not cases of insanity, properly so-called, but of delirium tremens. My impression is, that but few, if any, of these have been treated at the Friends' Asylum. But if any there

have been, the number of them should be rejected, and the recoveries would thus be proportionately reduced.

Any person who is interested in the subject will not neglect carefully to study the foregoing analysis. Considering all the circumstances, there is no collection of cases in America which more fairly represent the actual curability of mental disorders, when subjected to treatment within the year, than those of the Frankford Asylum. Yet, as they stand in mass, they offer neither ninety, nor eighty, nor seventy-five, nor seventy per cent. of recoveries; and the moment their columns are broken and they are subjected to such analysis as will detect the number of persons recovered, the proportion rapidly falls to a point below fifty per cent., still leaving unexamined influences which would probably carry it materially lower.

The report for 1869 of the Asylum at Dayton, Ohio, which was at that time under the superintendence of Dr. Richard Gundry, contains the results of treatment, in respect to restoration, of all the patients admitted in the course of the fourteen years during which that institution had been in operation. Of the one thousand four hundred and twenty-seven cases the duration of which did not exceed one year, eight hundred and thirty-one, or fifty-eight and twenty-three hundredths per cent. recovered. But these were cases, not persons. Were the proper deductions made, as in the cases at Frankford, for readmissions, it would be found that the recoveries of persons was little, if any, in excess of fifty in the hundred. Other proper deductions would doubtless reduce them below fifty per cent.

Of the one thousand four hundred and twenty-seven cases, five hundred and thirty came under treatment within one month subsequent to the attack. Of these, three hundred and sixty-three, or sixty-eight and forty-nine hundredths per cent., recovered. The recoveries

of *persons* probably but slightly exceeded sixty per cent. The very large proportion taken thus early to the hospital justifies the suspicion of many cases of delirium tremens, and many readmissions.

Dr. Godding, in the last published report of the State Hospital at Taunton, informs us that "out of three thousand one hundred and thirty-one patients admitted to the hospital, where the disease was of less than six months' duration at the time of admission, one thousand three hundred and fifty-one recovered." is forty-three and fourteen hundredths per cent. were cases, and not persons; and they do not include the cases of from six to twelve months' duration,—the most incurable of the cases which have existed less than a year. In justice, however, to Dr. Godding, no less than to truth, both scientific and general, it should be mentioned that the pressure of patients upon the Taunton Hospital has been so great, for several years, that many have been hurried away from it without sufficient trial of curative treatment; and that doubtless there was a no inconsiderable number of those who would otherwise have recovered.

It may here be mentioned, as bearing upon the subject under discussion, that at the Worcester Hospital, under Dr. Woodward, during the second period of five years of its operations, the per cent. of recoveries of recent cases was ninety and one-tenth, yet, twenty-four years later, under Dr. Bemis, during the period of five years, from 1864 to 1868, inclusive, it was but sixty-eight and eight-tenths. In both instances these were cases, and not persons; and the percentage was upon patients discharged, and not upon patients admitted.

Dr. Stearns, in the report of the Hartford Retreat for the official year ending with the close of March, 1876, asserts that during the first nine years of the operations of that institution, which was then in charge of Dr. Todd, ninety and one-tenth per cent. of recent cases recovered. Forty years afterwards, during the six years from 1869 to 1874, inclusive, under Doctors Butler, Denny and Stearns, in succession, only sixty-two and three-tenths per cent. recovered. The proportion of recoveries during the first period was forty-four and sixty-two hundredths per cent. greater than it was during the last period. If the proportion during the second period be represented by one hundred, that of the first period is represented by one hundred and forty-four and sixty-two hundredths.

The first European authority (Dr. Burrows) quoted in the discussion of this subject, is that of an eminent psychologist of London, fifty years ago. We have now arrived at a point where the recent language of another eminent psychologist, of the same city, may very appropriately be introduced. He speaks not alone from his own observation, which has probably been as extensive as that of Dr. Burrows, but out of the accumulated knowledge of the vastly enlarged experience of the last half-century in England. Dr. G. Fielding Blandford, lecturer on Psychological Medicine at the School of St. George's Hospital, London, uses the following language in his treatise upon mental disorders lately published:—

"If we could carefully watch every case of insanity from its commencement, I fear we should see that a less number than fifty-three per cent. recover from the first attack, so great is the proportion of those who are incurable from the first, or who, from the prejudices of friends, are not subjected to treatment till the chance of cure is gone; and if, by dint of proper treatment, the above percentage recover, they only recover, again to become insane in a large proportion."

Such was the testimony in the British capital, in 1870, precisely fifty years after the publication of the "Inquiry" by Dr. Burrows.

Having given a historical sketch of the means by which an impression of the eminent curability of insanity, in its recent stages, has been widely impressed upon the minds of persons more or less interested in the subject, and shown that the opinions of the writers who were chiefly instrumental in the production of that impression have not been sustained by subsequent and more enlarged experience, I now propose to give a cursory glance at the question of curability, in that broader signification which embraces all classes of cases, both recent and chronic, as they are received at the curative institutions.

Every person who has made himself conversant with the operations of the hospitals during the last thirty years, can not fail to have observed the constantly diminishing number of reported recoveries, relatively to the number of patients admitted.

At the State Hospital in Maine, in the five years from 1846 to 1850, inclusive, five hundred and eighty-seven patients were admitted, and two hundred and eighty-five, or a proportion of forty-eight and fifty-five hundredths per cent., recovered. At the same institution, in the five years from 1871 to 1875, inclusive, nine hundred and fifty-three were admitted, and three hundred and forty-nine, or a proportion of only thirty-six and sixty-two hundredths per-cent, recovered. The difference in the per cent. of recoveries is eleven and ninety-three hundredths.

At the McLean Asylum, in the five years from 1823 to 1827, inclusive, (fifty years ago.) the admissions were two hundred and ninety, and the recoveries one hundred and eighteen, or forty and sixty-nine hundredths per cent.; while in the five years from 1871 to 1875, the admissions were four hundred and twenty, and the recoveries ninety-one, which is only twenty-one and sixty-six hundredths per cent. The difference is

nineteen and three hundredths per cent. The proportion of recoveries is but little more than one-half as great as it was half a century ago.

At the Worcester Hospital, during the five years from 1839 to 1843, inclusive, nine hundred and twenty-two cases were admitted, and four hundred and forty-eight, or forty-eight and fifty nine hundredths per cent., recovered. During the five years from 1871 to 1875, inclusive, two thousand and sixty were admitted, and six hundred and thirteen, or only twenty-nine and seventy-five hundredths per cent., recovered. The ratio of recoveries is but about three-fifths as great as it was thirty-five years ago.

At the Utica asylum, from 1848 to 1852, inclusive, eighteen hundred and ninety cases were admitted, and eight hundred and sixteen recovered, which is forty-three and seventeen hundredths per cent.; whereas, from 1871 to 1875, inclusive, twenty-one hundred and twenty-five were admitted, and six hundred and eighty-seven, or only thirty-two and thirty-three hundredths per cent., recovered. The proportion of recoveries is about three-fourths as large as it was twenty-five years ago.

In each of these illustrative instances, the beginning of the first of the two periods of five years between which a comparison is instituted, was five years after the institution went into operation. For example, the Maine State Asylum was opened in 1840, and the first period used in the comparison is from 1845 to 1850. This was done for the purpose of avoiding the unnatural or abnormal influence, whether favorable or unfavorable,—as a general rule the latter,—of the cases which are taken to any new institution within the first year or more after its opening. After the lapse of five years, the current of admissions, it is assumed, has attained

its normal character in respect to the curability of the patients.

In the last report of the Hartford Retreat, Dr. Steams informs us that, at that institution, the percentage of recoveries "on all admissions" from 1824 to 1833, inclusive, was fifty-five and five tenths. During the next six years, from 1834 to 1839, inclusive, it was fifty-six and ninety hundredths; during the five years from 1847 to 1851, it was forty-eight and ten hundredths; during the thirteen years from 1855 to 1867, inclusive, forty-five and seven tenths; and during the six years ending with 1874, it was thirty-seven and eight tenths. The difference of the extremes is nineteen Hence, in about forty years, the proand one-tenth. portion of recoveries upon admissions diminished (from fifty-six and nine-tenths to thirty-seven and eight-tenths per cent.) a little more than one-third.

It is unnecessary to pursue this detailed illustration any farther. The cumulation of evidence may be presented in a manner more condensed. The table here subjoined contains the principal facts of evidence, as furnished by the reports of twenty institutions.

INSTITUTION.	Sec'nd five ye'rs from opening.	Last five years.	Total admitted.	Total recovered.	Per cent. of second five years.	Per cent. of last five years.	Decrease of per cent.
Augusta, Maine,	1846–50	1871-75	587 953	285 849	48.55	36.62	11.98
Concord, N. H.,	1848-52	1872–76	471 746	221 246	46.92	32.97	13.95
Brattleboro, Vt.,	*1841 -4 6	*1871-76	798 667	345 203	43.50	30.48	18.07
Mc Lean, Mass., "	1823–27	1871–75	290 420	118 91	40.69	21.66	19.03
Worcester, Mass.,	1839-43	1871-75	922 2,060	448 618	48.59	29.75	18.84
Taunton, Mass.,	1859-63	1871-75	1,182 2,189	492 506	43.46	28.11	20.85
Butler Hospital,	1854-58	1872–76	279 520	111 185	89.78	85.57	4.21
Hartford Retreat,	1829-33	1870-74	324 533	186 209	57.40 ····	89.21	18.19
Bloomingdale, N.Y.	1826-30	1871-75	685 602	302 196	47.55	82.55	15.00
Utica, N. Y	1848-52	1871-75	1,890 2,125	816 687	48.17	32.33	10.84
Flatbush, N. Y.,	1861-65	1871-75	1,072 1,700	449 568	41.88	83.11	8.77
Trenton, N. J.,	1858–57	1872–76	715 996	306 812	42.79	81.82	11.47
Pennsylvania Hosp.,	1846-50	1871-75	1,037 1,371	580 570	51.10	42.80	8.80
Dixmont, Pa.,	1861-65	1871-75	479 1,156	181 347	37.78	80.01	7.77
Catonsville, Md.,	1839-43	1871–75	876 671	194 274	51.59	40.88	10.76
Newburgh, Ohio,	•••••	1871-75	579 1,352	270 406	46.63	80.08	16.60
Dayton, Ohio,	1860-64	1870-74	492 1,737	296 786	60.16	45.25	14.91
Indianapolis, Ind.,	•••••	1871–76	826 1,932	478 1014	57.26	52.48	4.78
Jackson, Ill.,	*1855-60	*1869-74	937 1,818	436 581	46.53	81.96	14.57
Mendota, Wis.,	1865-69	1871-75	680 835	230 216	33.82	25.86	7.96

^{*} These are periods of six years each, rendered necessary by the fact that the hospitals issued reports biennally.

The total of admissions at the twenty institutions, in the course of the first period (second five years of operation,) is fourteen thousand five hundred and sixteen; the number of recoveries, six thousand six hundred and eighty-nine; and the proportion of recoveries on admissions, forty-six and eight hundredths per cent-

The admissions during the second period (last five years,) were twenty-four thousand three hundred and eighty-three; the recoveries, eight thousand three hundred and fifty-four; and the per cent. of recoveries, thirty-four and twenty-six hundredths.

The recoveries diminished from forty-six and eight hundredths, to thirty-four and twenty-six hundredths, which is eleven and eighty-two hundredths. The diminution of recoveries is equal to nearly twenty-six (25.66) per cent. of the recoveries of the first period. For every hundred that recovered on an average of twenty-five years ago, only a fraction over seventy-four (74.34) now recover-

The reader will observe that in all of the contents of this table, the figures relate to cases, and not to persons. The depreciation of percentage in such statistics, if the object be to ascertain the proportionate recoveries of insane persons, has been clearly illustrated. If only thirty four (34.26) in each hundred of the cases now received into the hospitals are discharged recovered, the recoveries of persons connot be more than about thirty in the hundred.

It has now been shown that,-

- 1. The reported recoveries from insanity are increased to an important extent by repeated recoveries from the periodical or recurrent form of the disease in the same person; and consequently,—
- 2. The recoveries of *persons* are much less numerous than the recoveries of *patients*, or *cases*; and, consequently,—

- 3. From the number of reported recoveries of cases, or patients, it is generally impossible to ascertain the number of persons who recovered.
- 4. The number of reported recoveries is influenced, sometimes largely, by the temperament of the reporter; each man having his own standard, or criterion, of insanity.
- 5. The large proportion of recoveries formerly reported, were often based upon the number of patients discharged, instead of the number admitted, and, generally, upon the results in a number of cases too small to entitle the deduction therefrom of a general formula of scientific truth; and those proportions were evidently increased by that zeal and (for want of a better word) rivalry which frequently characterize the earlier periods of a great philanthropic enterprise.
- 6. The assumed curability of insanity, as represented by those proportions, has not only not been sustained, but has been practically disproved by subsequent and more extensive experience.
- 7. The reported proportion of recoveries of all cases received at the institutions for the insane, has been constantly diminishing during a period of from twenty to fifty years.

The last clause under the fifth of these heads suggests the remark that, at a later period in the life of Dr. Luther V. Bell than that in which he wrote what is quoted in this article, his opinions in regard to the general curability of mental disorders underwent an important modification. He then regarded them as far less susceptible of cure than he had believed them to be in his earlier years; and the language which he used upon the subject contrasted so strongly with some of that which is herein quoted from his writings, that it might be alleged as indubitable proof that "a wise man sometimes changes his opinions."

If the causes of the general reduction of the proportion of recoveries, as stated under the seventh head, be sought, some of them will be found in, or inferred from, preceding portions of this discussion.

Among others are, first, the probable fact that, as institutions have multiplied, the proportion of chronic and incurable cases taken to them has increased; and, secondly, the not improbable fact that insanity, as a whole, is really becoming more and more an incurable disease. If it be true, as asserted by that accomplished scholar and profound thinker, Baron Van Feuchtersleben,—and doubtless no one will deny its truth,—that in the progress of the last few centuries, as civilization has advanced and the habits of the race have been consequently modified, disease has left its stronghold in the blood and the muscular tissues, and at length seated itself in the nervous system; it follows, perhaps, as a necessary consequence, that by a continuation of the cause of this change, the diseases of the brain and nerves must become more and more permanent.

Hence it has happened that the proportion of recoveries from insanity has not kept pace with the improvement of hospitals and of the management of the insane.

Dr. Isaac Ray, in his report of the State Hospital, in Maine, for the year 1844, asserted that "he would be a bold man who should venture to say that Pinel and Esquirol, whose medical treatment was confined chiefly to baths and simple bitter drinks, were less successful in their cure of mental diseases than those numerous practitioners who have exhausted upon them all the resources of the healing art."

If the assertion was true thirty-two years ago, it is believed that the contents of this exposition sufficiently prove that it is, to say the least, none the less true at the present day. The years of a generation have passed since that time, and, in the course of their progress, remedy after remedy before untried has come up, big with the word of promise to the hope, but essentially breaking it to experience. Haschish was experimentally tried, proved a failure, and is now nearly forgotten. Chloroform and ether have become convenient and useful to a certain extent, but they have no curative power previously unknown in other remedies. The same may be said of chloral and the bromides. Electro-magnetism, upon which great hopes were placed, is very beneficial in a few cases of abnormal nervous action, but hitherto has proved itself powerless to correct those cerebral functions the abnormal operations of which constitute insanity.

It would appear, indeed, that the truth of Dr. Ray's proposition would have been little if any affected, if he had gone back to a period a full century anterior to the time of Pinel. Dr. Burrows informs us, on the authorof Dr. Tyson, physician at Bethlehem at the time, that from 1684 to 1703, twelve hundred and nine-four, (1,294) patients were admitted to that hospital, and eight hundred and ninety (890) recovered. This proportion of recoveries is almost sixty-nine (68.77) in the hundred. But epileptics, paralytics, and perhaps some other incurables, were not admitted at Bethlehem at that time.

The reported recoveries at the same hospital, one hundred years later, in the decade from 1784 to 1794, were thirty-four in a hundred. By a remarkable coincidence, this proportion is almost identical with that (thirty-four and one hundredths) of the recoveries in all the institutions for the insane in England and Wales during the sixteen years from 1859 to 1874, both inclusive.

In approaching a conclusion, I quote from Dr. Thurnam his estimate of the curability of the insane, derived from a more thorough investigation of the

subject, as presented in the patients treated at the Retreat in York, England, during a period of forty-four years, than has ever been attempted by any other writer. I have long regarded this estimate as the most nearly accurate, and hence the most reliable, of any that has been published; and it is believed that the attentive reader of what has here been written will have arrived at a similar conclusion.

"In round numbers, then, of ten persons attacked by insanity, five recover, and five die, sooner or later, during the attack. Of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die. But, although the picture is thus an unfavorable one, it is very far from justifying the popular prejudice that insanity is virtually an incurable disease; and the view which it presents is much modified by the long intervals which often occur between the attacks; during which intervals of mental health (in many cases of from ten to twenty years' duration,) the individual has lived in all the enjoyments of social life."

Drs. Bucknill and Tuke, in their "Psychological Medicine," by far the best general treatise upon insanity in the English language—and there is reason to believe that it has no superior in any other language—so far endorse the results obtained by Dr. Thurnam, as to quote, not alone this extract, in which they are embodied, but the statistical table from which they are derived.

Our attention may be now redirected to the propositions at the beginning of this discussion, with a view to ascertain the effect of the facts and opinions herein adduced. In brief, then, it appears that it may fairly be asserted, first, that all estimates based upon the assumption that either seventy-five, or seventy, or sixty, or even fifty per cent. of the persons attacked with insanity can be cured and returned to the class of permanent producers in the sphere of human labor, are necessarily false, and consequently are both "a delusion"

and a snare;" and, secondly, that if the Vermont Asylum for the Insane can be justly censured or condemned because of the diminution in the proportionate number of its reported recoveries, its sister institutions, throughout the land, are generally in the same category of censurable organizations, and are open to a like condemnation.

Although it has here been shown, beyond cavil or question, that, as a whole, the cases of insanity are less curable than has, by many, heretofore been believed, and that the same is far more emphatically true of insane persons; yet, by so doing, no argument has been developed against the utility of hospitals, nor has the practical value of those establishments been in the least diminished. False impressions of their value may have been corrected; and, to that extent, not alone has the cause of truth, which is better than error, been promoted, but a measure of protection has been furnished to the medical officers of the hospitals. The declarations of the earlier superintendents are returning, like boomerangs, to spend their ultimate force upon their promulgators, or, as in the instance of the Vermont Asylum, herein mentioned, upon the persons now standing in the places of their promulgators. It is here demonstrated that there is a proper shield against their offensive assaults.

Meanwhile the institutions for the custody and cure of the insane have become a public necessity, and have proved themselves a greatly beneficent blessing to the people. Through their ministrations very many persons of disordered or perverted intellect have been restored to their homes, their friends, and their spheres of usefulness in society, permanently "clothed and in their right mind." Even to the political economist, or the sheerest utilitarian, this is a fact of significant importance; and, by the philosopher, the philanthropist,

or the christian, it must be regarded as a blessing above and beyond all estimate in standards of pecuniary value. Nor are the duplicate or the multiplicate recoveries of the persons subject to mental disorders of the recurrent type, to be too lightly estimated. A recovery is none the less desirable, and none the less valuable to the person, or to society, so long as the person remains well, because it is of limited duration.

While, then, the hospitals continue their progress in the fulfillment of their beneficent mission, it would appear that the better course for the superintendents is to discard, universally, as they already have discarded, to a great extent, the classification of their cases according to duration; but constantly to keep before the people the great truth that, as a rule having comparatively few exceptions, the sooner the person attacked with insanity is placed under curative treatment, the greater is the prospect of recovery.

